
INDEX

Volume 12, 1967

Soviet Physics - Doklady

INDEX

Volume 12, 1967

57th Annual Meeting

ABBASOV, A. R.

Relationship between the Radio Emission of Local Sources on the Sun and the Structure of Optically Observed Active Regions. (E) A. R. Abbasov. 12, 403 (1967) [174, 538 (1967)]

ABDULOV, R. Z.

Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys $\text{Fe}(\text{Pd}_{1-x}\text{Pt}_x)_2$. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorov, R. Z. Abdulov, and R. V. Pospelova. (T/E) 12, 974 (1968) [176, 1056 (1967)]

ABGARYAN, K. A.

The Asymptotic Solution of Equations for a Controllable Process. (T) K. A. Abgaryan. 12, 1098 (1968) [177, 796 (1967)]

ABLOV, A. V.

The Crystal Structure of Ammonium Bis- μ -(d -Tartrato)-Diborate (III). (E) G. A. Kiosse, N. I. Golovastikov, A. V. Ablov, and N. V. Belov. 12, 990 (1968) [177, 329 (1967)]

ADADUROV, G. A.

Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmian, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremia, A. Kh. Muranovich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]

ADAMENKO, A. A.

Effect of Deformation on the Angular Distribution of Annihilation Quanta in Nickel and Copper Alloys. (E) A. A. Adamenko, I. Ya. Dekhtyar, and V. S. Mikhailenkov. 12, 374 (1967) [173, 1291 (1967)]

ADEL'SON-VEL'SKII, G. M.

One Class of Adaptive Recognition Algorithms. (T) G. M. Adelson-Vel'skii, P. E. Kunin, and A. A. Leman. 12, 208 (1967) [173, 532 (1967)]

ADIROVICH, E. I.

Relaxation of Anomalous Large Photo-Voltages in Cadmium Telluride Films. (E) E. I. Adirovich and N. Shakirov. 12, 226 (1967) [173, 298 (1967)]

Schottky Emission and Currents in Dielectrics. (T) E. I. Adirovich and L. A. Dubrovskii. 12, 340 (1967) [173, 1032 (1967)]

Anomalous Photovoltaic Effect in Monochromatic Light. (E) E. I. Adirovich, V. M. Rubinov, and Yu. M. Yuzov. 12, 477 (1967) [174, 545 (1967)]

Emission Currents in Diodes Having a GaAs-Layer Structure. (E/T) E. I. Adirovich, L. A. Dubrovskii, and L. B. Suzdalina. 12, 1129 (1968) [177, 1047 (1967)]

AGASANDYAN, G. A.

Variable-Structure Automata. (T) G. A. Agasandyan. 12, 420 (1967) [174, 529 (1967)]

AINOLA, L. Ya.

Variational Principle of Dynamics in the Linear Theory of Elasticity. (T) L. Ya. Ainola. 12, 92 (1967) [172, 306 (1967)]

Variational Principles in the Dynamics of the Theory of Shells (T) L. Ya. Ainola. 12, 184 (1967) [172, 1296 (1967)]

AKHIMATOV, Yu. S.

The Mechanism of Growth of Graphite Crystals in Fe-C-Si Melt. (E) Yu. S. Akhmatov, K. P. Bunin, and Yu. N. Taran. 12, 1068 (1968) [177, 560 (1967)]

AKHTEDOV, Z. M.

The Differential Equations for the Filtration of a Gas-Liquid System Taking Account of Mass Transfer of Residual Water. (T) A. Kh. Mirzadzhanzade, Z. M. Akhtedov, and T. A. Samedov. 12, 930 (1968) [176, 1035 (1967)]

ALEKSANDROV, K. S.

Calculation of the Elastic Constants of Quasiasotropic Polycrystalline Materials. (T) K. S. Aleksandrov. 12, 872 (1967) [176, 295 (1967)]

ALEKSANYAN, T. A.

The Choice of the S Functions in the Method of Contact Transformations. (T) M. R. Aliev and T. A. Aleksanyan. 12, 229 (1967) [173, 302 (1967)]

ALEKSEEVSKII, N. E.

Superconductivity in the System $\text{Nb}_3\text{Al}-\text{Mo}_3\text{Al}$. (E) N. E. Alekseevskii, I. I. Kornilov, N. M. Matveeva, and Yu. A. Makshimov. 12, 275 (1967) [173, 553 (1967)]

Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. (E) N. E. Alekseevskii, O. S. Ivanov, I. I. Rzevskii, and N. V. Stepanov. 12, 896 (1968) [176, 305 (1967)]

ALIEV, A. A.

Anisotropy of the Angular Distribution and Structure of the Energy Distribution of Ions Scattered from the Surface of a Single Crystal. (E/T) A. A. Aliev and U. A. Arifov. 12, 30 (1967) [172, 65 (1967)]

ALIEV, M. R.

The Choice of the S Functions in the Method of Contact Transformations. (T) M. R. Aliev and V. T. Aleksanyan. 12, 229 (1967) [173, 302 (1967)]

ALIEV, Z. G.

Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmian, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremia, A. Kh. Muranovich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]

ALIKHANOV, S. G.

Radiation Instability of a Bounded Plasma. (T) S. G. Alikhanov. 12, 601 (1967) [174, 1300 (1967)]

ALISHAUSKAS, S. I.

Permutation Groups of the Representations of the Groups G_2 and SU_3 . (T) S. I. Alishauskas, Z. B. Rudzikas, and A. P. Yutis. 12, 23 (1967) [172, 58 (1967)]

The Clebsch-Gordan Coefficients of Symmetric Representations of the Groups SU_3 . (T) S. I. Alishauskas and A. P. Yutis. 12, 1012 (1968) [177, 61 (1967)]

AL'TOV, V. A.

A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheldin, E. I. Asinovskii, V. V. Sychev, V. B. Zenkevich, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]

AL'TSHULER, T. S.

Electron Paramagnetic Resonance of Rare-Earth Elements in Glasses. (E) T. S. Al'tshuler. 12, 481 (1967) [174, 549 (1967)]

AMIROV, S. T.

Crystal Structure of Synthetic Na, Zn-Diorthosilicate $\text{Na}_2\text{Zn}_2\text{Si}_2\text{O}_8$. (E) S. T. Amirov, A. V. Nikitina, V. V. Ilyukhin, and N. V. Belov. 12, 987 (1968) [177, 92 (1967)]

ANASKIN, I. F.

The Effect of the Incoherent Component of Electron Scattering on the Quality of the Interference Pattern. (T/E) I. G. Stoyanova and I. F. Anaskin. 12, 357 (1967) [173, 1052 (1967)]

Three-Beam Interference of Electrons by Means of an Electrostatic Prism. (E) I. F. Anaskin and I. G. Stoyanova. 12, 447 (1967) [174, 56 (1967)]

ANDREEV, N. S.

Interparticle Interference in Light Scattering by Glasses Containing Submicroscopic Inhomogeneities. (E/T) N. S. Andreev and T. I. Ershova. 12, 149 (1967) [172, 1299 (1967)]

ANDRIENKO, N. I.

The Electrical Discharge as a Converter of Electrical Energy into Mechanical Energy. (T/E) V. V. Rzhavskii, N. I. Andrienko, D. M. Migunov, and Yu. I. Protasov. 12, 579 (1967) [174, 795 (1967)]

ANISIMOV, S. I.

Automodel Solutions of the Problem Relating to the Recombination Decay of Plasma. (T) T. L. Perelman and S. I. Anisimov. 12, 136 (1967) [172, 817 (1967)]

ARBUZOVA, V. A.

Integrated Intensities in the Infrared Absorption Spectra of Methylethoxysilanes $(CH_3)_2Si(OC_2H_5)_{4-n}$ ($n = 0, 1, 2, 3$). (E) V. A. Arbuzova, I. F. Kovalev, E. N. Tikhomirova, M. G. Voronkov, and L. A. Zhagat. 12, 461 (1967) [174, 320 (1967)]

ARIFOV, U. A.

Anisotropy of the Angular Distribution and Structure of the Energy Distribution of Ions Scattered from the Surface of a Single Crystal. (E/T) A. A. Aliev and U. A. Arifov. 12, 30 (1967) [172, 65 (1967)]

ARISTOV, V. V.

Holography without a Reference Beam. (T/E) V. V. Aristov, V. L. Broude, L. V. Koval'skii, V. K. Polyanski, V. B. Timofeev, and V. Sh. Shekhtman. 12, 1035 (1968) [177, 65 (1967)]

ARTOBOLSKII, I. I.

Equations of Motion for a Mechanical System Containing a Variator. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 315 (1967) [173, 1017 (1967)]

Synthesis of a Mechanical System with Variator in Terms of the Given Motion of One Element. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 444 (1967) [174, 531 (1967)]

Optimization of the Synthesis of Technological Automatic Machines. (T) I. I. Artobolevskii, D. Ya. T'inskii, and I. I. Kapustin. 12, 1125 (1968) [177, 800 (1967)]

ASADOV, Yu. G.

Growth of a Hexagonal Selenium Crystal from a Monoclinic Selenium Single Crystal by a Polymorphic Transformation. (E) Yu. G. Asadov. 12, 199 (1967) [173, 570 (1967)]

ASINOVSKI, E. I.

A Pulsed Magneto-hydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillina, A. E. Sheindin, E. I. Asinovskii, V. V. Sychev, V. B. Zenkevich, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]

ASTAKHOV, A. V.

Thirring Four-Fermion Model and Perturbation Theory. (T) A. V. Astakhov. 12, 552 (1967) [174, 771 (1967)]

ATOVMYAN, L. O.

Formation of a Wurtzite-Like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmyan, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremin, A. Kh. Muranovich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]

The Structure of the Amide Group in p-Bromobenzoylthietylenimine. (E) R. P. Shibaeva, L. O. Atovmyan, and R. G. Kostyakovskii. 12, 669 (1968) [175, 586 (1967)]

BABADZHANOV, P. B.

The Structure of Meteors. (T) P. B. Babadzhanyan and E. N. Kramer. 12, 654 (1968) [175, 315 (1967)]

The Nature of Fragmentation in Meteoric Bodies. (E/T) P. B. Babadzhanyan and E. N. Kramer. 12, 1086 (1968) [177, 1043 (1967)]

BAIBAKOV, V. I.

Acoustoelectric Effect in CdSe under Constant Amplification of Ultrasound by Electron Flow. (T/E) V. I. Pustovoi, V. I. Baibakov, and G. S. Pado. 12, 576 (1967) [174, 791 (1967)]

BAIER, V. N.

Radiation Effects in Experiments with Colliding Electron Beams. (T) V. N. Baier, V. S. Fadin, and V. A. Khoze. 12, 464 (1967) [174, 323 (1967)]

BAKHSHEV, N. G.

Relations between the Optical Characteristics of a Material and the Einstein Coefficients of Its Molecules in the Case of Condensed Media and Levels of Finite Width. (T) N. G. Bakhshev, O. P. Girin, and V. S. Libov. 12, 935 (1968) [176, 805 (1967)]

BARABANENKOV, Yu. N.

Equation of Radiative Transfer in a Model of Isotropic Point Scatterers. (T) Yu. N. Barabanenkov. 12, 431 (1967) [174, 53 (1967)]

BARAMBOIM, N. K.

Electron Emission during Vibro-Mechanical Treatment of Polymers. (E) A. M. Polyakov, Yu. F. Kurdubov, N. K. Baramboim, and N. A. Krotova. 12, 720 (1968) [175, 72 (1967)]

BARANOV, A. A.

Deformation and Fracture of Cementite. (E) A. A. Baranov and O. I. Fomichev. 12, 495 (1967) [174, 71 (1967)]

BARANTSEV, R. G.

Boundary Conditions for the Navier-Stokes Equations in a Rarefied Gas. (T) R. G. Barantsev and M. O. Lutset. 12, 300 (1967) [173, 1021 (1967)]

BARTENEV, G. M.

Structure of Glass Fibers. (E) G. M. Bartenev and R. G. Chernyakov. 12, 615 (1967) [174, 800 (1967)]

The Nature of the Deformation of Inorganic Glasses during Microindention. (E) G. M. Bartenev and D. S. Sanditov. 12, 889 (1968) [176, 66 (1967)]

BASOV, N. G.

Formation of a Long Spark in Air by Weakly Focused Laser Radiation. (E/T) N. G. Basov, V. A. Bolko, O. N. Krokhin, and G. V. Sldizkov. 12, 248 (1967) [173, 538 (1967)]

Possibility of Modulating the Radiation of a Semiconductor Laser by Heating the Current Carriers. (T) N. G. Basov, Yu. M. Popov, and A. V. Uspenski. 12, 343 (1967) [173, 1036 (1967)]

BAVINA, T. V.

Formation of a Wurtzite-Like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmyan, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremin, A. Kh. Muranovich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]

BEGZHANOV, R. B.

Nuclear Resonance Fluorescence of Highly Excited States of Ni^{4+} , Cd^{14+} , and Pb^{208} . (E) S. V. Starodubtsev, R. B. Begzhanyan, and A. A. Islamov. 12, 472 (1967) [174, 332 (1967)]

BELITSKII, I. A.

Proton Magnetic Resonance and Position of Hydrogen Atoms in Natural Edingtonite. (E/T) I. A. Belitskii, S. P. Gabuda, and A. G. Lundin. 12, 119 (1967) [172, 1318 (1967)]

BELOV, N. V.

The Crystal Structure of Trivalent Cobalt Amines with Intraphase Thiocyanate Group. (E/T) L. D. Samus' and N. V. Belov. 12, 105 (1967) [173, 83 (1967)]

Crystal Structure of Potassium Bichromate $K_2Cr_2O_7$ (Lopezite). (E) E. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 12, 293 (1967) [173, 1068 (1967)]

Crystal Structure of Na₂-Silicate $Na_2CO_3Si_2O_5 \cdot Na_2CO_3Si_2O_5$. (E) M. A. Simonov, Yu. K. Egorov-Tismenko, and N. V. Belov. 12, 662 (1968) [175, 80 (1967)]

Crystal Structure of Synthetic Na₂ Zn-Diorthosilicate $Na_2Zn_2Si_2O_7$. (E) S. T. Amirov, A. V. Nikitin, V. V. Ilyukhin, and N. V. Belov. 12, 987 (1968) [177, 92 (1967)]

The Crystal Structure of Ammonium Bis-μ-(d-Tartrato)-Distribate (III). (E) G. A. Kloss, N. I. Golovastikov, A. V. Ablov, and N. V. Belov. 12, 990 (1968) [177, 329 (1967)]

Crystal Structure of NaSmSiO₄. (E) A. V. Chichagov, V. V. Ilyukhin, and N. V. Belov. 12, 997 (1968) [177, 574 (1967)]

Crystal Structure of Vinogradovite $Na_4Ti_4[Si_3O_{10}]_4O_4 \cdot nH_2O$. (E) R. K. Rastvetova, V. I. Simonov, and N. V. Belov. 12, 1090 (1968) [177, 832 (1967)]

- BELIAEV, A. I.**
Effect of a Third Component on the Behavior of Impurities in the Zone Melting of Aluminum. (E) A. I. Belyaev and A. I. Yukova. 12, 827 (1968) [175, 1259 (1967)]
- BELIAEV, Yu. N.**
Interaction Potentials of H and He Atoms and H₂ Molecules. (E/T) Yu. N. Belyaev and V. B. Leonas. 12, 233 (1967) [173, 306 (1967)]
- BELIAKOV, G. V.**
Equation of State of Trinitrotoluene. (T) G. V. Belyakov and G. G. Vilenskaya. 12, 1132 (1968) [177, 1050 (1967)]
- BELI, V. V.**
Application of Control Feedback for Identification and Estimate of the Stability Margin of Stochastic Plants. (T) V. V. Belyi and M. F. Dimentberg. 12, 1101 (1968) [177, 1030 (1967)]
- BERESNEV, B. I.**
Electron-Microscopic Examination of Chromium and Molybdenum Deformed under High Pressure. (E) E. D. Martynov, V. I. Tretyakov, S. A. Firatov, B. I. Beresnev, and Yu. N. Ryabinin. 12, 956 (1968) [176, 1276 (1967)]
- BERMAN, I. B.**
Identification of Etch Figures on Tracks of Fission Fragments in Ionic Crystals. (E) I. G. Berzina and I. B. Berman. 12, 484 (1967) [174, 553 (1967)]
- BERZINA, I. G.**
Identification of Etch Figures on Tracks of Fission Fragments in Ionic Crystals. (E) I. G. Berzina and I. B. Berman. 12, 484 (1967) [174, 553 (1967)]
- The Kinetics of Healing of Fission-Fragment Tracks in Thin Mica Sheets. (E/T) Ya. E. Geguzin, I. G. Berzina, and I. V. Vorob'eva. 12, 814 (1968) [175, 807 (1967)]
- Possibility of Demonstrating the Migration of Uranium and Ra Decay Products in Minerals. (E) I. G. Berzina, A. N. Stolyarova, G. N. Flerov, and Yu. S. Shimelevich. 12, 1155 (1968) [177, 1062 (1967)]
- BICHENKOV, E. I.**
Explosive Generators. (E) E. I. Bichenkov. 12, 567 (1967) [174, 779 (1967)]
- BODRETISOVA, A. I.**
Quasi-continuous Laser on a CaF₂-Dy³⁺ Base with Pyrotechnic Excitation. (E) A. I. Bodretsova, A. A. Kaminskii, S. I. Levikov, and V. V. Osiko. 12, 507 (1967) [174, 337 (1967)]
- BOGACHEV, I. N.**
The ΔE Effect and Antiferromagnetism in Iron-Manganese Alloys. (E) I. N. Bogachev, V. F. Egolsev, and B. A. Potekhin. 12, 377 (1967) [173, 1295 (1967)]
- BOGOMOLOVA, L. D.**
Hypertine Structure of the Electron Paramagnetic Resonance Spectra of the Vanadyl Ion in Vanadium-Containing Glass. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskiy. 12, 780 (1968) [175, 789 (1967)]
- Electron Paramagnetic Resonance Study of the Mechanism of Electrical Conductivity in the Glasses of the Ternary System V₂O₅-P₂O₅-WO₃. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskiy. 12, 1046 (1968) [177, 310 (1967)]
- BOGUSLAVSKI, I. A.**
Controlled Hardening of Glass by Quenching in Liquids. (E) I. A. Boguslavskii. 12, 380 (1967) [173, 1298 (1967)]
- BOIKO, Yu. I.**
Effect of X Radiation on Mutual Diffusion in Single Crystals of Alkali Halides. (E) Ya. E. Geguzin and Yu. I. Boiko. 12, 161 (1967) [172, 820 (1967)]
- The Experimental Separation of the Frenkel and Kirkendall Effects. (E) Ya. E. Geguzin, Yu. I. Boiko, and L. N. Paritskaya. 12, 267 (1967) [173, 323 (1967)]
- BOIKO, V. A.**
Formation of a Long Spark in Air by Weakly Focused Laser Radiation. (E/T) N. G. Basov, V. A. Boiko, O. N. Krokhin, and G. V. Sklizkov. 12, 248 (1967) [173, 538 (1967)]
- BOKAREVA, N. N.**
Effect of Initial Crystallographic Orientation on the Recrystallization Temperature of Wire Obtained from Molybdenum Single Crystals. (E) E. M. Savitskii, G. S. Burkhanov, N. N. Bokareva, A. S. Grokhovskinskii, and E. V. Ottenberg. 12, 76 (1967) [172, 87 (1967)]
- BONDAREV, D. E.**
Influence of SeO₃ on Magnetic Properties of Ferrite Cores of the Copper-Manganese System. (E) D. E. Bondarev and Yu. M. Kozlovskiy. 12, 724 (1968) [175, 553 (1967)]
- BORISOV, S. V.**
X-Ray Structural Study of the Double Molybdate KY(MoO₄)₂. (E) R. F. Klevtsova and S. V. Borisov. 12, 1095 (1968) [177, 1333 (1967)]
- BOROD'KO, Yu. G.**
Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmian, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremin, A. Kh. Muranevich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]
- BRAILOVSKAYA, I. Yu.**
Flow of a Viscous Gas near a Wall with a Corner. (T) I. Yu. Brailovskaya. 12, 845 (1968) [176, 549 (1967)]
- BRAUDE, I. S.**
Determination of the Dispersion of Elastic Vibrations in the Potassium Chloride Crystal Lattice Using X-Ray Diffuse Scattering. (E) V. I. Startsev and I. S. Braude. 12, 138 (1967) [172, 1053 (1967)]
- BREUSOV, O. N.**
Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmian, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremin, A. Kh. Muranevich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]
- BROUDE, V. L.**
The Effect of Generation Self-cutoff in a Ruby Laser. (E) V. L. Broude, V. I. Kravchenko, P. P. Pogoretskii, E. N. Sal'kova, and M. S. Soskin. 12, 214 (1967) [173, 64 (1967)]
- Holography without a Reference Beam. (T/E) V. V. Aristov, V. L. Broude, L. V. Koval'skii, V. K. Polyanskiy, V. B. Timofeev, and V. Sh. Shekhtman. 12, 1035 (1968) [177, 65 (1967)]
- BUDEKOV, G. A.**
Determination of Stresses in Solids by the Polarized-Ultrasonic Frequency Method. (E) Yu. A. Nilender, G. A. Budakov, and G. Ya. Pochtovik. 12, 641 (1967) [174, 1065 (1967)]
- BUD'KO, L. I.**
Momentum and Energy of Gravitational Waves. (T) M. F. Shirokov and L. I. Bud'ko. 12, 62 (1967) [172, 326 (1967)]
- BUDNIKOV, P. P.**
Spontaneous Growth of Magnesium Oxide Single Crystal Whiskers. (E) P. P. Budnikov, V. A. Perepelitsin, D. B. Sanchlov, and V. K. Sturman. 12, 752 (1968) [175, 1045 (1967)]
- BULGAKOV, A. A.**
Determination of the Continuous Effective Component of Quasi-continuous Sampled-Data Systems. (T) A. A. Bulgakov. 12, 416 (1967) [174, 45 (1967)]
- BUNIN, K. R.**
The Mechanism of Growth of Graphite Crystals in Fe-C-Si Melt. (E) Yu. S. Akhmatov, K. P. Bunin, and Yu. N. Taran. 12, 1089 (1968) [177, 560 (1967)]
- BURAVIKHIN, V. A.**
Influence of Uniaxial Stresses on the Galvanomagnetic Effect in Thin Ferromagnetic Films. (E) V. A. Buravikhin and V. S. Khristosenko. 12, 603 (1967) [174, 1302 (1967)]
- Measurement of Magnetoresistance in Thin Nickel Films. (T/E) K. A. Yakovlev and V. A. Buravikhin. 12, 701 (1968) [175, 66 (1967)]
- BURKHANOV, G. S.**
Effect of Initial Crystallographic Orientation on the Recrystallization Temperature of Wire Obtained from Molybdenum Single Crystals. (E) E. M. Savitskii, G. S. Burkhanov, N. N. Bokareva, A. S. Grokhovskinskii, and E. V. Ottenberg. 12, 76 (1967) [172, 87 (1967)]

BURNAK, Ya. I.

An Extremum Problem in Thermoelasticity for an Infinite Cylindrical Shell. (T) É. I. Grigolyuk, Ya. I. Burnak, and Ya. S. Podstrigach. 12, 521 (1967) 174, 534 (1967)

BYKOVTSSEV, G. I.

Relations on Surfaces of Discontinuity of Stress in Three-Dimensional Perfectly Rigid-Plastic Solids. (T) G. I. Bykovtsev, D. B. Ivlev, and Yu. M. Myasnyanin. 12, 1167 (1968) 177, 1059 (1967)

BYSTROV, L. N.

Effect of Electron Bombardment on the Mechanical Properties of High-Strength Steel. (E) B. A. Prussakov, D. A. Prokoshkin, L. N. Bystrov, and L. I. Ivanov. 12, 912 (1968) 176, 568 (1967)

CHAIKOVSKI, V. M.

X-Ray Analysis of the Structure of Nematic Liquid Crystals in Electric and Magnetic Fields by Means of the Distribution Function. (E) B. K. Vainshtein, I. G. Chistyakov, E. A. Kosterin, and V. M. Chaikovskii. 12, 405 (1967) 174, 341 (1967)

CHEBANOV, V. M.

On the Disintegration of the Structure and Strength of Polymer Materials. (E) A. A. Vakulenko, Yu. N. Litov, and V. M. Chebanov. 12, 691 (1968) 175, 539 (1967)

CHENTSOV, N. N.

Optimum Strategy for Correction. (T) D. E. Okhotsimskii, V. A. Rysanin, and N. N. Chentsov. 12, 675 (1968) 175, 47 (1967)

CHEPELEVA, I. V.

Hyperfine Structure of the EPR Line with a Factor ~ 4.3 Due to Mn^{2+} in the Chalcogenide Glasses $Ti_2SeAs_2Se_3$, $Ti_2As_2S_3$, and $Ti_2TeAs_2Te_3$. (E) V. N. Lazukin and I. V. Chepeleva. 12, 606 (1967) 174, 1306 (1967)

CHEREPANOV, G. Ts.

Contact Problem of Elastoplasticity for Plates. (T) L. A. Galin and G. Ts. Cherepanov. 12, 1074 (1968) 177, 56 (1967)

CHEREPANOV, V. I.

Group Theoretical Classification of the States of Pairs and Complexes of Paramagnetic Impurity Ions in Crystals. (T) S. V. Vonsovskii, V. I. Cherepanov, A. N. Men', and A. E. Nikiforov. 12, 570 (1967) 174, 783 (1967)

CHERKASOV, I. I.

Deformation of Brittle Porous Materials under Compressive Stress in a Compression Apparatus. (E) I. I. Cherkasov and Kh. Ibragimov. 12, 876 (1968) 176, 73 (1967)

CHERNYAKOV, R. G.

Structure of Glass Fibers. (E) G. M. Bartenev and R. G. Chernyakov. 12, 615 (1967) 174, 800 (1967)

CHERNYAVSKI, B. A.

The Mechanism Responsible for the Adhesion of a Fluid Jet to the Wall of a Fluid Amplifier - The Coanda Effect. (E) K. K. Shal'nev, B. A. Chernyavskii, and Yu. S. Demidov. 12, 680 (1968) 175, 55 (1967)

CHERNYI, G. G.

Asymptotic Law of Propagation of a Plane Detonation Wave. (T) G. G. Chernyi. 12, 21 (1967) 172, 558 (1967)

CHERNYI, L. N.

Nature of Optical Inhomogeneities in Quartz Crystals. (E) G. V. Kleshechev, I. V. Kabanovich, and L. N. Chernyi. 12, 413 (1967) 174, 585 (1967)

CHERNYKH, E. M.

Thermodynamic Relations on the Surface of a Strong Discontinuity in a Finely Deformed Elastic Medium. (T) E. M. Chernykh. 12, 1079 (1968) 177, 546 (1967)

CHETAEV, D. N.

The Equations of Electrodynamics for Anisotropic Media. (T) D. N. Chetaev. 12, 555 (1967) 174, 775 (1967)

Electromagnetic Potentials in Gyrotropic Media. (T) D. N. Chetaev and M. G. Savina. 12, 584 (1967) 174, 1296 (1967)

CHICHAGOV, A. V.

Crystal Structure of Na_2SiO_3 . (E) A. V. Chichagov, V. V. Ryukhin, and N. V. Belov. 12, 997 (1968) 177, 574 (1967)

CHICHEROV, V. M.

Effect of Thermal Vibrations of the Crystal Lattice on the Anisotropy of Sputtering and Ion-Electron Emission Coefficients of Single Crystals. (E) I. N. Evdokimov, V. A. Molchanov, D. D. Odintsov, and V. M. Chicherov. 12, 1050 (1968) 177, 550 (1967)

CHIRIKOV, B. V.

Stochastic Breakdown of Magnetic Surfaces in a Stellarator. (T) B. V. Chirikov. 12, 612 (1967) 174, 1313 (1967)

CHIRKOV, L. K.

Thermal Processes in Thin Films. (T) Yu. M. Volokobinskii, B. Yu. Lototskii, V. V. Pasynkov, and L. K. Chirkov. 12, 73 (1967) 172, 83 (1967)

CHISTYAKOV, I. G.

X-Ray Analysis of the Structure of Nematic Liquid Crystals in Electric and Magnetic Fields by Means of the Distribution Function. (E) B. K. Vainshtein, I. G. Chistyakov, E. A. Kosterin, and V. M. Chaikovskii. 12, 405 (1967) 174, 341 (1967)

CHUPYATOVA, L. P.

Dislocation Structure of Ordered Copper-Nickel-Zinc Alloys. (E) V. G. Kurdymov and L. P. Chupyatova. 12, 164 (1967) 172, 823 (1967)

DAVYDOV, A. S.

Calculation of the Energy of Molecular Excitons. (T) A. S. Davydov and É. N. Myasnikov. 12, 346 (1967) 173, 1040 (1967)

DEGTYAREV, L. M.

Nonlinear Effect of the Formation of a Self-sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samarskii, L. A. Zaklyaz'minski, P. P. Volosov, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favoritski. 12, 331 (1967) 173, 808 (1967)

DEINEGA, Yu. F.

Rheological Properties of Plastic Greases and Frictional Torque in Journal Bearings at Low Speeds. (E) Yu. F. Deinega and Ya. A. Verbitskii. 12, 82 (1967) 172, 572 (1967)

DEKHTYAR, I. Ya.

Effect of Deformation on the Angular Distribution of Annihilation Quanta in Nickel and Copper Alloys. (E) A. A. Adamenko, I. Ya. Dekhtyar, and V. S. Mikhailenko. 12, 374 (1967) 173, 1291 (1967)

Effect of Magnetic Transformations on the Shape of the Angular Distribution of γ Quanta from Positron-Electron Annihilation in Ferromagnetic Materials. (E) I. Ya. Dekhtyar, V. S. Mikhailenko, and S. G. Sakharova. 12, 618 (1967) 174, 803 (1967)

Influence of Plastic Deformation on the Mossbauer Effect in Fe-Ni Invar Alloys. (E/T) I. Ya. Dekhtyar, B. G. Eglazarov, L. M. Isakov, V. S. Mikhailenko, and V. P. Romashko. 12, 727 (1968) 175, 556 (1967)

DEMIDOV, B. A.

Plasma Resistance as a Function of Electric Field Strength. (E) B. A. Demidov, N. I. Etagin, and S. D. Fanchenko. 12, 467 (1967) 174, 327 (1967)

DEMIDOV, Yu. S.

The Mechanism Responsible for the Adhesion of a Fluid Jet to the Wall of a Fluid Amplifier - The Coanda Effect. (E) K. K. Shal'nev, B. A. Chernyavskii, and Yu. S. Demidov. 12, 680 (1968) 175, 55 (1967)

DENISYUK, Yu. N.

Possibility of Obtaining Holograms Using a Reference Beam Whose Wavelength Differs from the Wavelength of the Light Scattered by an Object. (T) Yu. N. Denisyuk and D. I. Stasel'ko. 12, 954 (1968) 176, 1274 (1967)

DERYAGIN, B. V.

Deposition of a Coating on a Moving Glass Rod. (E/T) B. V. Deryagin, P. S. Kireev, V. A. Ryabov, and D. V. Fedoseev. 12, 176 (1967) 172, 1312 (1967)

Application of the Method of Bhattacharya, Gross, and Krook to the Determination of the Velocity of Thermal Slip of a Gas Past a Surface. (T) B. V. Deryagin, Yu. I. Yalamov, and I. N. Ivchenko. 12, 362 (1967) 173, 1287 (1967)

- Theory of Motion of Large Volatile Particles in Diffusing Gas Mixtures. (T) B. V. Deryagin and Yu. I. Yalamov. 12, 587 (1967) [174, 1048 (1967)]
- A Theory of the Motion of Solution Drops in a Diffusing Binary Gas Mixture. (T) B. V. Deryagin and Yu. I. Yalamov. 12, 694 (1968) [175, 59 (1967)]
- Velocity Distribution Function of the Gas Molecules near a Solid Wall in a Nonuniformly Heated Gas. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 714 (1968) [175, 549 (1967)]
- Gas-Kinetic Analysis of the Thermal Slip Velocity of a Gas near a Solid Surface. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 1044 (1968) [177, 74 (1967)]
- DIESPEROV, V. N.
Damping of Perturbations Produced by a Solid of Revolution in a Viscous Heat-Conducting Supersonic Gas Flow. (T) V. N. Diesperov and O. S. Ryzhov. 12, 651 (1968) [175, 51 (1967)]
- DIMENTBERG, M. F.
Application of Control Feedback for Identification and Estimate of the Stability Margin of Stochastic Plants. (T) V. V. Belyi and M. F. Dimenberg. 12, 1101 (1968) [177, 1030 (1967)]
- DIETLER, G. I.
Long-Range Action of Active Centers on Crystal Surfaces. (E) G. I. Dietler and S. A. Kobzareva. 12, 112 (1967) [172, 1069 (1967)]
- Dislocations Growth of Natural Crystals as a Result of Long-Range Action of Active Local Centers. (T) G. I. Dietler and B. B. Zvyagin. 12, 535 (1967) [174, 1082 (1967)]
- DRANOVA, Zh. I.
Mechanical Strength of Tungsten Microcrystals. (E) R. I. Garber, Zh. I. Dranova, and I. M. Mikhailovskii. 12, 584 (1967) [174, 1044 (1967)]
- DREMIN, A. N.
Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmyan, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremmin, A. Kh. Muranovich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]
- DROKIN, A. I.
Temperature Dependence of the First Magnetic-Anisotropy Constant of Ferrite Single Crystals with Spinel Structure as a Function of the Saturation Magnetization. (E) A. I. Drokina. 12, 454 (1967) [174, 64 (1967)]
- DROZDOV, V. A.
Negative Photochemical Effect in Cadmium Sulfide. (E/T) V. A. Drozdov, L. A. Mozgovaya, and A. L. Ryachev. 12, 1038 (1968) [177, 68 (1967)]
- DROZDOVSKII, B. A.
Fracture Diagrams of Solids. (E) B. A. Drozdovskii, V. M. Markochev, and Ya. B. Fridman. 12, 622 (1967) [174, 807 (1967)]
- DUBROVSKII, L. A.
Schottky Emission and Currents in Dielectrics. (T) É. I. Adirovich and L. A. Dubrovskii. 12, 340 (1967) [173, 1032 (1967)]
- Emission Currents in Diodes Having a GaAs-Layer Structure. (E/T) É. I. Adirovich, L. A. Dubrovskii, and L. B. Suzdalkina. 12, 1129 (1968) [177, 1047 (1967)]
- DUKHOVSKI, E. A.
Controlling the Adhesion Components of Friction. (E) E. A. Dukhovskii, I. V. Kragelskii, and A. A. Silin. 12, 730 (1968) [175, 560 (1967)]
- D'YACHENKO, V. F.
A Model for Continuous Media. (T) V. F. D'yachenko. 12, 544 (1967) [174, 760 (1967)]
- DZHUSUPOV, K.
Unsteady Escape of Gas in a Constant Gravity Field. (T) K. P. Stanyukovich and K. Dzhusupov. 12, 1110 (1968) [177, 804 (1967)]
- EDEL'MAN, I. S.
Faraday Effect and Optical Constants of Iron-Nickel Alloy Films. (E) L. V. Kirenskii, N. I. Syrova, and I. S. Edel'man. 12, 819 (1968) [175, 813 (1967)]
- EGANYAN, I. L.
Effects of Atomic Ordering in Ternary Solid Solutions Based on Ni₃Fe Alloyed with Group VI Elements, Cr, Mo, and W. (E) I. L. Eganyan and Ya. P. Selskii. 12, 269 (1967) [173, 325 (1967)]
- EGEREV, V. K.
Operational Method of Determining Certain Integral Characteristics of Nonstationary Transport Processes in Active Media. (T) V. K. Egerev. 12, 493 (1967) [174, 564 (1967)]
- EGIAZAROV, B. G.
Influence of Plastic Deformation on the Mössbauer Effect in Fe-Ni Invar Alloys. (E/T) I. Ya. Dekhtyar, B. G. Egiazarov, L. M. Isakov, V. S. Mikhailenkov, and V. P. Romashko. 12, 727 (1968) [175, 556 (1967)]
- EGOLAEV, V. F.
The ΔE Effect and Antiferromagnetism in Iron-Manganese Alloys. (E) I. N. Bogachev, V. F. Egolaev, and B. A. Potekhin. 12, 377 (1967) [173, 1295 (1967)]
- EGOROVA, V. F.
Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Galaktionova, V. F. Egorova, V. S. Zubkova, A. A. Mak, and D. S. Prilezhaev. 12, 360 (1967) [173, 1284 (1967)]
- EGOROV-TISENENKO, Yu. K.
Crystal Structure of Na₂CoSi₂O₆ = Na₂Cd₂(Si₂O₇)₂. (E) M. A. Simonov, Yu. K. Egorov-Tismenko, and N. V. Belov. 12, 662 (1968) [175, 80 (1967)]
- ELAGIN, N. I.
Plasma Resistance as a Function of Electric Field Strength. (E) B. A. Demidov, N. I. Elagin, and S. D. Fanchanko. 12, 467 (1967) [174, 327 (1967)]
- EL'KIN, A. I.
Frictional Properties of Rubber-like Polymers at High Temperatures under Vacuum. (E) A. I. El'kin and V. N. Nikolaev. 12, 384 (1967) [173, 1302 (1967)]
- ÉNTIN, R. I.
Characteristics of the Polymorphic Transformation in Iron Containing Small Amounts of Carbon. (E) L. I. Kogan, G. A. Fainlevich, and R. I. Éntin. 12, 625 (1967) [174, 811 (1967)]
- ENKOVSKI, L.
On Current Divergences. (T) L. Enkovskii, V. V. Kukhtin, I. Montval, and Nguyen Van Hieu. 12, 874 (1968) [176, 298 (1967)]
- ÉPSHTEIN, É. M.
The Theory of Electroacoustic Phenomena in Solids. (T) É. M. Épshtein. 12, 245 (1967) [173, 320 (1967)]
- ÉPSHTEIN, G. N.
Peculiarities of the Mechanism of Fast Deformations in Hexagonal-Closed-Packed Metals. (E) O. A. Kabyshev, Ya. S. Umanski, and G. N. Épshtein. 12, 1072 (1968) [177, 562 (1967)]
- ERMOLAEV, A. M.
Perturbation Theory for the Expansion Coefficients of a Two-Electron Wave Functions. (T) A. M. Ermolaev. 12, 1144 (1968) [177, 1302 (1967)]
- ERMOLENKO, A. S.
Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. (E) Ya. S. Shur, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko. 12, 793 (1968) [175, 804 (1967)]
- EROSHENKOVA, I. G.
The Three-Dimensional Periodic Modulated Structure in Alloys of the Fictitious Type and the Structure of Alloys of the AlNi Type. (E) Yu. D. Tyapkina and I. G. Eroshenkova. 12, 391 (1967) [173, 1309 (1967)]
- ERSHOV, B. V.
Two-Photon Absorption in CaF₂·H⁺ Crystals. (E/T) B. V. Ershov, Yu. P. Pimenov, A. M. Prokhorov, and V. B. Fedorov. 12, 47 (1967) [172, 309 (1967)]
- ERSHOV, I. V.
Use of an Interferometer with a Diffraction Grating to Investigate Flow around Models in a Shock Tube. (T) L. A. Vasil'ev, I. V. Ershov, É. V. Sokolenko, and V. I. Yanichkin. 12, 802 (1968) [175, 1245 (1967)]

- ERSHOVA, T. I.**
Interparticle Interference in Light Scattering by Glasses Containing Submicroscopic Inhomogeneities. (E/T) N. S. Andreev and T. I. Ershova. 12, 149 (1967) [172, 1299 (1967)]
- EVDOKIMOV, I. N.**
Effect of Thermal Vibrations of the Crystal Lattice on the Anisotropy of Sputtering and Ion-Electron Emission Coefficients of Single Crystals. (E) I. N. Evdokimov, V. A. Molchanov, D. D. Odintsov, and V. M. Chicherov. 12, 1050 (1968) [177, 550 (1967)]
- EVDOKIMOV, V. D.**
Investigation of Exoelectronic Emission due to Sliding Friction. (E) V. D. Evdokimov. 12, 732 (1968) [175, 563 (1967)]
Influence of Surface-Active Lubricants on Internal Stresses in Reversing Sliding. (E) V. D. Evdokimov. 12, 817 (1968) [175, 810 (1967)]
- FADIN, V. S.**
Radiation Effects in Experiments with Colliding Electron Beams. (T) V. N. Baier, V. S. Fadin, and V. A. Khoze. 12, 464 (1967) [174, 323 (1967)]
- FAIDYSH, A. N.**
Interaction between Triplet Excitons and the Excited Molecules of an Impurity. (E) A. S. Gaevskii and A. N. Faidysh. 12, 130 (1967) [172, 809 (1967)]
- FAIVLEVICH, G. A.**
Characteristics of the Polymorphic Transformation in Iron Containing Small Amounts of Carbon. (E) L. I. Kogan, G. A. Faivlevich, and R. I. Entin. 12, 625 (1967) [174, 811 (1967)]
- FANCHENKO, S. D.**
Plasma Resistance as a Function of Electric Field Strength. (E) B. A. Demidov, N. I. Elagin, and S. D. Fanchenko. 12, 467 (1967) [174, 327 (1967)]
- FAVORSKII, A. P.**
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samarski, L. A. Zaklyazminskii, P. P. Volosov, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]
- FEDORENKO, A. I.**
Study of Defects in Mutually Oriented Polycrystalline Bi-Sb Films by the Moiré Method. (E) L. S. Palatnik, V. M. Kosevich, and A. I. Fedorenko. 12, 717 (1968) [175, 69 (1967)]
- FEDOROV, F. I.**
Elementary Particles in the Field of a Plane Electromagnetic Wave. (T) F. I. Fedorov. 12, 474 (1967) [174, 334 (1967)]
- FEDOROV, L. I.**
Complex Splitting of the Nuclear Magnetic Resonance Spectrum of a Two-Spin System. (T/E) B. M. Moiseev and L. I. Fedorov. 12, 806 (1968) [175, 1249 (1967)]
- FEDOROV, V. B.**
Two-Photon Absorption in $\text{CaF}_2:\text{Ho}^{3+}$ Crystals. (E/T) V. B. Ershov, Yu. P. Pimenov, A. M. Prokhorov, and V. B. Fedorov. 12, 47 (1967) [172, 309 (1967)]
- FEDOSEEV, D. V.**
Deposition of a Coating on a Moving Glass Rod. (E/T) B. V. Deryagin, P. S. Kireev, V. A. Ryabov, and D. V. Fedoseev. 12, 176 (1967) [172, 1312 (1967)]
- FEKLICHEV, E. M.**
Production of Artificial "Ballas"-Type Diamonds. (E) Ya. A. Kalashnikov, L. F. Vereshchagin, E. M. Feklichev, and I. S. Sukhushina. 12, 40 (1967) [172, 76 (1967)]
- FEL'D, Ya. N.**
The Uniqueness of Solutions of Integral Equations of the Second Kind for Diffraction on Nonclosed Screens. (T) Ya. N. Fel'd. 12, 1122 (1968) [177, 820 (1967)]
- FEL'DGUN, L. I.**
Transition of Silicon Carbide from the Hexagonal to the Cubic Phase under the Influence of High Pressures and High Temperatures. (E) M. I. Sokhor, V. G. Kondakov, and L. I. Fel'dgun. 12, 749 (1968) [175, 626 (1967)]
- Magnesium Borides Prepared under Superhigh-Pressure Conditions.** (E) N. E. Filonenko, V. I. Ivanov, L. I. Fel'dgun, M. I. Sokhor, and L. F. Vereshchagin. 12, 833 (1968) [175, 1266 (1967)]
- FEOFILOV, P. P.**
Cooperative Luminescence Sensitization of Silver-Halide Salts and Spectral Sensitization of Photographic Emulsions. (E) V. V. Ovsyannik and P. P. Feofilov. 12, 573 (1967) [174, 787 (1967)]
- FILIPPOV, B. N.**
Absorption of Ultrasound by Free Electrons of a Metal in a Quantizing Magnetic Field. (T) P. S. Zyryanov and B. N. Filippov. 12, 698 (1968) [175, 63 (1967)]
- FILIPPOV, E. S.**
Structural Transitions in Iron-Carbon Melts. (E/T) E. S. Filippov, V. K. Grigorovich, and A. M. Samarin. 12, 284 (1967) [173, 564 (1967)]
- FILLER, F. M.**
An Algorithm for the Determination of Parameters of a Particle Moving in a Hydrogen Chamber under Conditions of an Inhomogeneous Magnetic Field and Damping. (T) F. M. Filler. 12, 1138 (1968) [177, 1058 (1967)]
- FILONENKO, N. E.**
Magnesium Borides Prepared under Superhigh-Pressure Conditions. (E) N. E. Filonenko, V. I. Ivanov, L. I. Fel'dgun, M. I. Sokhor, and L. F. Vereshchagin. 12, 833 (1968) [175, 1266 (1967)]
- FIL'SHTINSKII, L. A.**
Doubly Periodic Problem in the Theory of a Circular Closed Cylindrical Shell. (T) L. A. Fil'shtinskii. 12, 739 (1968) [175, 512 (1967)]
- FIRSTOV, S. A.**
Electron-Microscopic Examination of Chromium and Molybdenum Deformed under High Pressure. (E) E. D. Martynov, V. I. Treflov, S. A. Firstov, B. I. Beresnev, and Yu. N. Ryabinin. 12, 956 (1968) [176, 1276 (1967)]
- FLEROV, G. N.**
Possibility of Demonstrating the Migration of Uranium and Its Decay Products in Minerals. (E) I. G. Berzina, A. N. Stolyrova, G. N. Flerov, and Yu. S. Shmelevich. 12, 1155 (1968) [177, 1062 (1967)]
- FOMICHEV, O. I.**
Deformation and Fracture of Cementite. (E) A. A. Baranov and O. I. Fomichev. 12, 495 (1967) [174, 71 (1967)]
- FRANK-KAMENETSKII, D. A.**
The Stability of Motion of a Charged Particle in the Simplest Geometry of a Modulated Magnetic Field. (T) Yu. N. Smirnov and D. A. Frank-Kamenetskii. 12, 609 (1967) [174, 1309 (1967)]
- FRIDMAN, Ya. B.**
Kinetics of Fracture under Biaxial Stress. (E) Ya. B. Fridman, T. K. Zilova, and N. I. Novosiltseva. 12, 518 (1967) [174, 572 (1967)]
- Fracture Diagrams of Solids.** (E) B. A. Drodzovskii, V. M. Markochev, and Ya. B. Fridman. 12, 622 (1967) [174, 807 (1967)]
- FROST, V. A.**
Acceleration of Molecular Transport Processes in a Turbulent Flow. (T) V. A. Frost. 12, 921 (1968) [176, 794 (1967)]
- GABUDA, S. P.**
Proton Magnetic Resonance and Position of Hydrogen Atoms in Natural Edingtonite. (E/T) I. A. Belitskii, S. P. Gabuda, and A. G. Lundin. 12, 119 (1967) [172, 1318 (1967)]
- GAEVSKII, A. S.**
Interaction between Triplet Excitons and the Excited Molecules of an Impurity. (E) A. S. Gaevskii and A. N. Faidysh. 12, 130 (1967) [172, 809 (1967)]
- GALAKTIONOVA, N. M.**
Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Galaktionova, V. F. Egorova, V. S. Zubkova, A. A. Mak, and D. S. Prilizev. 12, 360 (1967) [173, 1284 (1967)]

- GALKIN, A. A.
Isotopic Hyperfine Structure of the EPR Spectrum of Cu^{2+} in ZnWO_4 . (E) A. A. Galkin, A. D. Prokhorov, G. A. Tsintsadze, and V. A. Shapovalov. 12, 236 (1967) [173, 309 (1967)]
- GALIN, L. A.
Contact Problem of Elastoplasticity for Plates. (T) L. A. Galin and G. Ts. Cherepanov. 12, 1074 (1968) [177, 56 (1967)]
Deformation of an Orthotropic Viscoelastic Body under Plane-Problem Conditions. (T) L. A. Galin. 12, 1164 (1968) [177, 808 (1967)]
GAMLITSKII, V. Ya.
Spin Relaxation of Iron in the Ferromagnetic Compounds MnSb and CrTe below the Curie Point. (E) S. S. Yakimov, V. Ya. Gamlitskii, V. I. Nikolaev, and S. R. Rodin. 12, 1164 (1968) [177, 1313 (1967)]
- GARBER, R. I.
Mechanical Strength of Tungsten Microcrystals. (E) R. I. Garber, Zh. I. Dranov, and I. M. Mikhailovskii. 12, 584 (1967) [174, 1044 (1967)]
- GAVERLOVA, A. V.
Electron-Microscopic Study of the Spatial Distribution of Nucleated Precipitation Phase in Aging of Cu-Be and Ni-Be Alloys. (E) A. V. Gavrilova, Yu. D. Tyapkina, and M. P. Usikov. 12, 970 (1968) [175, 1052 (1967)]
- GEGUZIN, Ya. E.
Effect of X Radiation on Mutual Diffusion in Single Crystals of Alkali Halides. (E) Ya. E. Geguzin and Yu. I. Boiko. 12, 161 (1967) [172, 820 (1967)]
The Experimental Separation of the Frenkel and Kirkendall Effects. (E) Ya. E. Geguzin, Yu. I. Boiko, and L. N. Paritskaya. 12, 267 (1967) [173, 323 (1967)]
The Kinetics of Healing of Fission-Fragment Tracks in Thin Mica Sheets. (E) T. Ya. E. Geguzin, I. G. Berzina, and I. V. Vorob'eva. 12, 814 (1968) [175, 807 (1967)]
- GENERALOV, N. A.
Dependence of the Vibrational Deactivation of the Iodine Molecule on the Ratio of the Collision Time to the Period of Vibration. (E) N. A. Generalov and V. D. Kosynkin. 12, 796 (1968) [175, 1033 (1967)]
- GEORGIEVA, I. Ya.
The Nature of the Kinetics of the Martensitic Transformation of Hot-Worked Austenite. (E/T) I. Ya. Georgieva, G. V. Kurydunov, O. P. Makimova, and V. V. Nemirovskii. 12, 368 (1967) [173, 1055 (1967)]
- GERNET, G. E.
Change in the Angular and Energy Distribution of a Flow of Charged Particles on Passing through a Magnetic Field. (T) G. E. Gernet. 12, 254 (1967) [173, 544 (1967)]
- GERSHUN, A. S.
Laws Governing the Nonstationary Current in Metal-Dielectric-Metal Systems. (E) A. S. Gershun and B. L. Timan. 12, 237 (1967) [173, 310 (1967)]
- GINDIN, I. A.
Strengthening of Crystalline Substances by the Stepped Low-Temperature Creep Method. (E) I. A. Gindin, V. M. Godzhaev, N. K. Nechvolod, and Ya. D. Starodubov. 12, 498 (1967) [174, 73 (1967)]
- GINZBURG, V. L.
The Question of High-Temperature and Surface Superconductivity. (T) V. L. Ginzburg and D. A. Kirzhnits. 12, 880 (1968) [176, 553 (1967)]
- GRIN, O. P.
Relations between the Optical Characteristics of a Material and the Einstein Coefficients of Its Molecules in the Case of Condensed Media and Levels of Finite Width. (T) N. G. Bakshiev, O. P. Grin, and V. S. Libov. 12, 935 (1968) [176, 895 (1967)]
- GITERMAN, M. Sh.
Study of the Critical State of a Liquid Using Gravitational Waves. (E/T) M. Sh. Giterman. 12, 1141 (1968) [177, 1298 (1967)]
- GLADYSHEVSKII, E. I.
Crystal Structure of MoCoSi . (E) E. I. Gladyshevskii, P. I. Kripyakevich, and R. V. Skolozdra. 12, 755 (1968) [175, 1047 (1967)]
- GLAZER, A. A.
Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. (E) Ya. S. Shur, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko. 12, 793 (1968) [175, 804 (1967)]
- GLOBENKO, I. G.
Generalization of a Theorem of M. Inagaki. (T) I. G. Globenko. 12, 1104 (1968) [177, 1034 (1967)]
- GODZHAEV, V. M.
Strengthening of Crystalline Substances by the Stepped Low-Temperature Creep Method. (E) I. A. Gindin, V. M. Godzhaev, N. K. Nechvolod, and Ya. D. Starodubov. 12, 498 (1967) [174, 73 (1967)]
- GOL'DSHTEIK, M. A.
Motion of an Ideal Fluid in a Coriolis Force Field. (T) I. I. Vainshtein and M. A. Gol'dshchik. 12, 303 (1967) [173, 1277 (1967)]
- GOLOVASTIKOV, N. I.
The Crystal Structure of Ammonium Bis- μ -(d-Tartrate)-Diborate (III). (E) G. A. Kiosse, N. I. Golovastikov, A. V. Ablov, and N. V. Belov. 12, 990 (1968) [177, 329 (1967)]
- GOLOVIN, S. A.
Strengthening of Metals by Decorating Dislocations with Surface-Active Impurities. (E) V. I. Likhtman, M. A. Krishal, S. A. Golovin, and I. A. Goncharenko. 12, 167 (1967) [172, 826 (1967)]
- GOLUBEV, V. G.
Regions where Motion is Impossible in the Three-Body Problem. (T) V. G. Golubev. 12, 529 (1967) [174, 787 (1967)]
- GONCHARENKO, I. A.
Strengthening of Metals by Decorating Dislocations with Surface-Active Impurities. (E) V. I. Likhtman, M. A. Krishal, S. A. Golovin, and I. A. Goncharenko. 12, 167 (1967) [172, 826 (1967)]
- GORIDOV, S. I.
Behavior of the Critical Current in Wires of Superconducting Niobium Alloys as a Function of Magnetic Field and Temperature. (E) B. G. Lazarev, L. S. Lazareva, and S. I. Goridov. 12, 1150 (1968) [177, 1310 (1967)]
- GORLOV, G. V.
Polarization Effects in Coulomb Scattering of 4-MeV Neutrons by Copper, Lead, and Uranium. (E/T) G. V. Gorlov, N. S. Lebedeva, and V. M. Morozov. 12, 451 (1967) [174, 60 (1967)]
- GORSHKOV, A. G.
Motion of a Rigid Sphere under the Influence of an Acoustic Pressure Wave. (T) É. I. Grigolyuk and A. G. Gorshkov. 12, 1009 (1968) [177, 539 (1967)]
- GORSHKOVA, I. N.
Initial Stages of Two-Dimensional Nonstationary Gas Flow. (T) I. N. Gorshkova and K. P. Stanyukovich. 12, 827 (1968) [176, 1270 (1967)]
- GRIGOLYUK, É. I.
An Extremum Problem in Thermoelasticity for an Infinite Cylindrical Shell. (T) É. I. Grigolyuk, Ya. I. Burak, and Ya. S. Podstrigach. 12, 521 (1967) [174, 534 (1967)]
- Motion of a Rigid Sphere under the Influence of an Acoustic Pressure Wave. (T) É. I. Grigolyuk and A. G. Gorshkov. 12, 1009 (1968) [177, 539 (1967)]
- GRIGOROVICH, V. K.
Structural Transitions in Iron-Carbon Melts. (E/T) E. S. Filippov, V. K. Grigorovich, and A. M. Samarin. 12, 284 (1967) [173, 564 (1967)]
- GROKHOCHINSKII, A. S.
Effect of Initial Crystallographic Orientation on the Recrystallization Temperature of Wire Obtained from Molybdenum Single Crystals. (E) E. M. Savitskii, G. S. Burkanov, N. N. Bokareva, A. S. Grokhochinskii, and E. V. Ottenberg. 12, 76 (1967) [172, 87 (1967)]
- GROMOV, V. G.
Concerning a Method for Describing the Viscoelastic Behavior of Polymeric Substances. (T) V. G. Gromov. 12, 289 (1967) [173, 288 (1967)]
- GURVICH, A. S.
Probability Distribution of the Square of the Temperature Difference between Two Points of a Turbulent Flow. (E/T) A. S. Gurvich. 12, 17 (1967) [172, 554 (1967)]
- GURZADYAN, G. A.
Electron Temperature in Stellar Envelopes Containing High-Energy Electrons. (E) G. A. Gurzadyan. 12, 105 (1967) [172, 1046 (1967)]

- The Lithium Content of T Tauri Stars and Cosmic Rays. (T) G. A. Gurzadyan. 12, 848, (1968) 176, 291 (1967)
- IBRAGIMOV, Kh. I.**
Surface Tension of Melts Belonging to the Tin-Gold System. (E) N. L. Pokrovskii, P. P. Pugachevich, and Kh. I. Ibragimov. 12, 170 (1967) 172, 828 (1967)
- Deformation of Brittle Porous Materials under Compressive Stress in a Compression Apparatus. (E) I. I. Cherkasov and Kh. Ibragimov. 12, 876 (1968) 176, 73 (1967)
- IL'INSKII, D. Ya.**
Optimization of the Synthesis of Technological Automatic Machines. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 12, 1125 (1968) 177, 800 (1967)
- ILYUKHIN, V. V.**
Crystal Structure of Potassium Bichromate $K_2Cr_2O_7$ (Lopezite). (E) E. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 12, 293 (1967) 173, 1068 (1967)
- Crystal Structure of Synthetic Na. Zn-Dioctasilicate $Na_2Zn_2Si_2O_8$. (E) S. T. Amirov, A. V. Nikitin, V. V. Ilyukhin, and N. V. Belov. 12, 987 (1968) 177, 92 (1967)
- Crystal Structure of $NaSmSiO_4$. (E) A. V. Chichagov, V. V. Ilyukhin, and N. V. Belov. 12, 997 (1968) 177, 574 (1967)
- ISAKOV, L. M.**
Influence of Plastic Deformation on the Mössbauer Effect in Fe-Ni Invar Alloys. (E/T) L. Ya. Dekhtyar, B. G. Egiazarov, L. M. Isakov, V. S. Mikhailenkov, and V. P. Romashko. 12, 727 (1968) 175, 556 (1967)
- ISAKOVA, E. K.**
Long-Time Behavior of the Solution of the Cauchy-Poisson Problem. (T) E. K. Isakova. 12, 854 (1968) 176, 50 (1967)
- ISALMOV, A. A.**
Nuclear Resonance Fluorescence of Highly Excited States of Ni^{42} , Cd^{114} , and Pb^{208} . (E) S. V. Starodubtsev, R. B. Begzhanov, and A. A. Isalmov. 12, 472 (1967) 174, 332 (1967)
- IVANOV, L. I.**
Mechanism of High-Temperature Creep of Metals with High Stacking-Fault Energy. (T) V. A. Yanushkevich and L. I. Ivanov. 12, 905 (1968) 176, 312 (1967)
- Effect of Electron Bombardment on the Mechanical Properties of High-Strength Steel. (E) B. A. Prusakov, D. A. Prokoshkin, L. N. Bystron, and L. I. Ivanov. 12, 912 (1968) 176, 568 (1967)
- IVANOV, O. S.**
Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. (E) N. E. Alekseevskii, O. S. Ivanov, I. I. Raevskii, and V. V. Stepanov. 12, 896 (1968) 176, 395 (1967)
- IVANOV, V. I.**
Magnesium Borides Prepared under Superhigh-Pressure Conditions. (E) N. E. Filonenko, V. I. Ivanov, L. I. Fel'dgun, M. I. Sokhor, and L. F. Vereshchagin. 12, 833 (1968) 175, 1266 (1967)
- IVCHENKO, I. N.**
Application of the Method of Bhatnagar, Gross, and Krook to the Determination of the Velocity of Thermal Slip of a Gas Past a Surface. (T) B. V. Deryagin, Yu. I. Yalamov, and I. N. Ivchenko. 12, 362 (1967) 173, 1287 (1967)
- Velocity Distribution Function of the Gas Molecules near a Solid Wall in a Nonuniformly Heated Gas. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 714 (1968) 175, 549 (1967)
- Gas-Kinetic Analysis of the Thermal Slip Velocity of a Gas near a Solid Surface. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 1044 (1968) 177, 74 (1967)
- IVLEV, D. D.**
Dissipative Function in the Theory of Plastic Media. (T) D. D. Ivlev. 12, 883 (1968) 175, 1037 (1967)
- Relations on Surfaces of Discontinuity of Stress in Three-Dimensional Perfectly Rigid-Plastic Solids. (T) G. I. Bykovtsev, D. D. Ivlev, and Yu. M. Myasnyanskii. 12, 1167 (1968) 177, 1039 (1967)
- KABALKINA, S. S.**
X-Ray Structural Analysis of the Crystal Structure of Iodine under High Pressure. (E) S. S. Kabalkina, T. N. Kolobyanina, and L. F. Vereshchagin. 12, 50 (1967) 172, 313 (1967)
- X-Ray Diffraction Study of ZnF_2 at Pressures up to 130 kbar and $\angle$ Temperatures of 25 and 300°. (E/T) S. S. Kabalkina, L. F. Vereshchagin, and L. M. Litvynina. 12, 946 (1968) 176, 1044 (1967)
- KABANOV, M. V.**
Experimental Study of the Limits of Applicability of Buger's Law for the Description of the Attenuation of Narrow Collimated Light Beams in Dispersive Media. (E) V. E. Zuev, M. V. Kabanov, and V. A. Savel'ev. 12, 704 (1968) 175, 327 (1967)
- KABANOVICH, I. V.**
Nature of Optical Inhomogeneities in Quartz Crystals. (E) G. V. Kleshchev, I. V. Kabanovich, and L. N. Chernyi. 12, 413 (1967) 174, 585 (1967)
- KADYSHEVSKII, V. G.**
Mass Formulas in the Theory of Unitary Symmetry. (T) V. G. Kadysheski. 12, 37 (1967) 172, 73 (1967)
- KAFENGAUZ, N. L.**
Characteristics of the Heat Transfer to a Turbulent Fluid Flow at Supercritical Pressure. (E/T) N. L. Kafengauz. 12, 278 (1967) 173, 557 (1967)
- KAIYSHEV, O. A.**
Peculiarities of the Mechanism of Fast Deformations in Hexagonal-Closed-Packed Metals. (E) O. A. Kaiyshev, Ya. S. Umanskii, and G. N. Épstein. 12, 1072 (1968) 177, 562 (1967)
- KALASHNIKOV, V. V.**
Operating Stability of Complex Systems. (T) V. V. Kalashnikov. 12, 1106 (1968) 177, 1294 (1967)
- KALASHNIKOV, Ya. A.**
Production of Artificial "Ballas"-Type Diamonds. (E) Ya. A. Kalashnikov, L. F. Vereshchagin, E. M. Fel'dichev, and I. S. Sukhushina. 12, 40 (1967) 172, 76 (1967)
- KALININ, V. G.**
Fast Electrons and X-Ray Radiation during the Initial Stage of Growth of a Pulsed Spark Discharge in Air. (E) Yu. L. Stankevich and V. G. Kalinin. 12, 1042 (1968) 177, 72 (1967)
- KAMINSKII, A. A.**
Quasi-continuous Laser on a CaF_2 - Dy^{3+} Base with Pyrotechnic Excitation. (E) A. I. Bodretsova, A. A. Kaminskii, S. I. Levikov, and V. V. Osiko. 12, 507 (1967) 174, 337 (1967)
- KAPUSTIN, I. I.**
Optimization of the Synthesis of Technological Automatic Machines. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 12, 1125 (1968) 177, 800 (1967)
- KASHIN, V.**
Electromagnetic Potentials and Their Gauging in Anisotropic, Dispersive, and Moving Media. (T) A. Viglin and V. Kashin. 12, 322 (1967) 173, 797 (1967)
- KAZAKEVICH, V. V.**
Approximate Integration of the Rayleigh Equation for Any Nonlinearity. (T) V. V. Kazakevich. 12, 1027 (1968) 177, 291 (1967)
- KELAREV, V. V.**
Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys $Fe(Pd_{1-x}Pt_x)_{1-x}$. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorov, R. Z. Abdalov, and R. V. Pospelova. 12, 974 (1968) 176, 1056 (1967)
- KHADZHI, I. P.**
Electron-Microscope Study of Synthetic Quartz with a Nonstructural Impurity. (E) I. P. Khadzhi and V. E. Khadzhi. 12, 122 (1967) 175, 1321 (1967)
- KHADZHI, V. E.**
Electrolysis of Synthetic Quartz Containing a Nonstructural Impurity. (E) V. G. Lushnikov and V. E. Khadzhi. 12, 116 (1967) 172, 1072 (1967)

- Electron-Microscope Study of Synthetic Quartz with a Nonstructural Impurity. (E) I. P. Khadzhii and V. E. Khadzhii. 12, 122 (1967) [172, 1321 (1967)]
- KHALFIN, L. A.
The Nonexponential Decay Law and Interference Experiments. (T) L. A. Khalfin. 12, 143 (1967) [172, 1059 (1967)]
- KHARCHENKO, L. Yu.
Hydrothermal Synthesis and Symmetry of Crystals of the Oxytungstates $\text{Ln}_2\text{W}_2\text{O}_7$ (Ln = Ce, Pr, and Nd). (E) P. V. Klevtsov, L. Yu. Kharchenko, and R. F. Klevtsova. 12, 851 (1968) [176, 575 (1967)]
- A Study of Crystalline Tungstate-Chloride LnWO_4Cl (Ln = Ce, Pr, Nd). (E) L. Yu. Kharchenko, P. V. Klevtsov, and L. P. Solov'eva. 12, 919 (1968) [176, 826 (1967)]
- KHARAKHORIN, F. F.
Study of Solid Solutions in the HgTe - HgS and HgSe - HgS Systems. (E) F. F. Kharkhorin, V. M. Petrov, M. V. Pashkovskii, and R. V. Lotsev. 12, 869 (1968) [176, 62 (1967)]
- KHAZANOVICH, T. N.
The Influence of the Hydrodynamic Interaction on the Inter-molecular Contribution to the Magnetic Relaxation Time in Liquids. (T/E) T. N. Khazanovich. 12, 886 (1968) [176, 560 (1967)]
- KHODZHAEV, L. Sh.
Properties of the Cluster Decomposition of the Causal S-Matrix. (T) L. Sh. Khodzhaev. 12, 306 (1967) [173, 789 (1967)]
- KHOMYAKOV, Yu. M.
Influence of Sc_2O_3 on Magnetic Properties of Ferrite Cores of the Copper-Manganese System. (E) D. E. Bondarev and Yu. M. Khomyakov. 12, 724 (1968) [175, 553 (1967)]
- KHORUZHII, S. S.
Local Properties of Unrenormalizable Theories. (T) S. S. Khoruzhii. 12, 1019 (1968) [177, 306 (1967)]
- KHOZE, V. A.
Radiation Effects in Experiments with Colliding Electron Beams. (T) V. N. Baier, V. S. Fadiv, and V. A. Khoze. 12, 464 (1967) [174, 323 (1967)]
- KHRAPKO, R. I.
Determination of the Type of a Space According to Petrov's Classification. (T) R. I. Khrapko. 12, 861 (1968) [176, 56 (1967)]
- KHRISTSENKO, V. S.
Influence of Uniaxial Stresses on the Galvanomagnetic Effects in Thin Ferromagnetic Films. (E) V. A. Buravikhin and V. S. Khristosenko. 12, 603 (1967) [174, 1302 (1967)]
- KIOSSE, G. A.
The Crystal Structure of Ammonium Bis- μ -(d-Tartrate)-Dibromide (III). (E) G. A. Kiose, N. I. Golovastikov, A. V. Ahlov, and N. B. Belov. 12, 990 (1968) [177, 329 (1967)]
- KIREEV, P. S.
Deposition of a Coating on a Moving Glass Rod. (E/T) B. V. Deryagin, P. S. Kireev, V. A. Ryabov, and D. V. Fedoseev. 12, 176 (1967) [172, 1312 (1967)]
- KIRENSKII, L. V.
Faraday Effect and Optical Constants of Iron-Nickel Alloy Films. (E) L. V. Kirenskii, N. I. Syrova, and L. S. Edel'man. 12, 819 (1968) [175, 813 (1967)]
- Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-Co System. (E) L. V. Kirenskii, S. G. Rasova, G. I. Rasova, and N. I. Sivkov. 12, 977 (1968) [176, 1282 (1967)]
- KIRILLIN, V. A.
A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheindlin, E. I. Asinovskii, V. V. Sychev, V. B. Zenkevich, A. M. Maksimov, and A. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]
- KIRZHITS, D. A.
The Question of High-Temperature and Surface Superconductivity. (T) V. L. Ginzburg and D. A. Kirzhits. 12, 886 (1968) [176, 353 (1967)]
- KISLOVSKII, L. D.
Metastable Structures in Aqueous Solutions. (T) L. D. Kislovskii. 12, 759 (1968) [175, 1277 (1967)]
- KITAEVA, V. F.
Spectroscopic Investigation of Gas Discharge for Argon Ion-Optical Lasers. (E) V. F. Kitayeva, Yu. I. Osipov, and N. N. Sobolev. 12, 55 (1967) [172, 317 (1967)]
- KITAIGORODSKII, A. I.
Crystal Growth in Polymorphic Transitions in Glutaric Acid and Hexachloroethane. (E) Yu. V. Mnyukh, N. I. Musae, and A. I. Kitaigorodskii. 12, 409 (1967) [174, 345 (1967)]
- KIVILIS, V. M.
A Model for the Reflection of Ions from a Single Crystal. (T) V. M. Kivilis, E. S. Parilis, and N. Yu. Turaev. 12, 328 (1967) [173, 805 (1967)]
- KLESHCHEV, G. V.
Nature of Optical Inhomogeneities in Quartz Crystals. (E) G. V. Kleshchev, I. V. Kabazovich, and L. N. Chernyi. 12, 413 (1967) [174, 585 (1967)]
- KLEVTSOV, P. V.
Hydrothermal Synthesis and Symmetry of Crystals of the Oxytungstates $\text{Ln}_2\text{W}_2\text{O}_7$ (Ln = Ce, Pr, and Nd). (E) P. V. Klevtsov, L. Yu. Kharchenko, and R. F. Klevtsova. 12, 851 (1968) [176, 575 (1967)]
- A Study of Crystalline Tungstate-Chloride LnWO_4Cl (Ln = Ce, Pr, Nd). (E) L. Yu. Kharchenko, P. V. Klevtsov, and L. P. Solov'eva. 12, 919 (1968) [176, 826 (1967)]
- KLEVTSOVA, R. F.
Hydrothermal Synthesis and Symmetry of Crystals of the Oxytungstates $\text{Ln}_2\text{W}_2\text{O}_7$ (Ln = Ce, Pr, and Nd). (E) P. V. Klevtsov, L. Yu. Kharchenko, and R. F. Klevtsova. 12, 851 (1968) [176, 575 (1967)]
- X-Ray Structural Study of the Double Molybdate $\text{KY}(\text{MoO}_4)_2$. (E) R. F. Klevtsova and S. V. Borisov. 12, 1095 (1968) [177, 1333 (1967)]
- KLOSS, B. M.
Determination of the Regularity of Automata from Their Canonical Equations. (T) B. M. Kloss and V. A. Malyshev. 12, 14 (1967) [172, 543 (1967)]
- KLYUSHIN, V. V.
Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys $\text{Fe}(\text{Pd}_{1-x}\text{Pt}_x)_2$. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorov, R. Z. Abdulov, and R. V. Pospelova. 12, 974 (1968) [176, 1056 (1967)]
- KOBZAREVA, S. A.
Long-Range Action of Active Centers on Crystal Surfaces. (E) G. I. Distler and S. A. Kobzareva. 12, 112 (1967) [172, 1069 (1967)]
- KOCHANOV, F. P.
A Solution of the Generalized Problem of I. Ya. Shterman. (T) F. P. Kochanov. 12, 398 (1967) [173, 1028 (1967)]
- KOCHINA, N. N.
The Solution of a Diffusion Problem with a Nonlinear Boundary Condition. (T) N. N. Kochina. 12, 425 (1967) [174, 305 (1967)]
- KOGAN, A. M.
Variational Principles for the Equations of the Kinetic Theory of Gases. (T) A. M. Kogan. 12, 777 (1968) [175, 785 (1967)]
- KOGAN, L. I.
Characteristics of the Polymorphic Transformation in Iron Containing Small Amounts of Carbon. (E) L. I. Kogan, G. A. Faivilevich, and R. I. Éntin. 12, 625 (1967) [174, 811 (1967)]
- KOLESOVA, R. V.
The Crystal Structure of Liroconite. (E) R. V. Kolesova. 12, 538 (1967) [174, 1317 (1967)]
- KOLBOYANINA, T. N.
X-Ray Structural Analysis of the Crystal Structure of Iodine under High Pressure. (E) S. S. Kabalkina, T. N. Kolobyanina, and L. F. Vorobchagin. 12, 50 (1967) [172, 313 (1967)]
- KOLONTSOV, V. Yu.
Guinier-Preston Zones in Iron-Chromium Alloys. (E/T) E. Z. Vintalkin and V. Yu. Kolontsov. 12, 962 (1968) [176, 812 (1967)]

- KOLONTSOVA, E. V.**
Structural Changes in Quartz in the Neighborhood of the $\alpha \rightarrow \beta$ Transition. (E) E. V. Kolontsova and I. V. Telegina. 12, 350 (1967) [172, 1045 (1967)]
- KOMAR, A. P.**
Holography Using a Direct Reference Beam. (E/T) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 371 (1967) [173, 1059 (1967)]
Phase Holograms of Tracks in Bubble and Emulsion Chambers and the Feasibility of Interpreting Them. (E) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 590 (1967) [174, 1052 (1967)]
- KONDAKOV, V. G.**
Transition of Silicon Carbide from the Hexagonal to the Cubic Phase under the Influence of High Pressures and High Temperatures. (E) M. I. Sokhor, V. G. Kondakov, and L. I. Fel'dgun. 12, 749 (1968) [175, 826 (1967)]
- KONDRASHEV, A. I.**
Energy Spectrum of Electrons Emitted from a KCl Single Crystal Bombarded with Helium Ions. (E) A. I. Kondrashev and N. N. Petrov. 12, 217 (1967) [173, 67 (1967)]
- KONOPLEVA, N. P.**
The Group of Motions of a Straight Line and the Geometrical Theory of Fields. (T) N. P. Konopleva and G. A. Sokolik. 12, 1016 (1968) [177, 302 (1967)]
- KONYUKHOV, V. K.**
Two-Photon Absorption Spectrum in CaS near the Fundamental Absorption Edge. (E/T) V. K. Konyukhov, L. A. Kulevskii, and A. M. Prokhorov. 12, 354 (1967) [173, 1048 (1967)]
- KOPTSIK, V. A.**
Morphology and Some Properties of Al_2O_3 Crystals Grown from Tungstate Melts. (E) V. I. Voronkov, V. K. Yanovskii, and V. A. Koptsik. 12, 994 (1968) [177, 571 (1967)]
- KORCHAK, A. A.**
Possible Polarization of Bremsstrahlung from Solar Flares. (T) A. A. Korchak. 12, 192 (1967) [172, 291 (1967)]
- KORNILOV, I. I.**
Superconductivity in the System $\text{Nb}_3\text{Al}-\text{Mo}_3\text{Al}$. (E) N. E. Alekseevskii, I. I. Kornilov, N. M. Matveeva, and Yu. A. Maksimov. 12, 275 (1967) [173, 553 (1967)]
- KOROBENIKOV, V. P.**
Point Explosion in a Detonating Gas. (T) V. P. Korobenikov. 12, 1003 (1968) [177, 295 (1967)]
- KOSEVICH, V. M.**
Study of Defects in Mutually Oriented Polycrystalline Bi-Sb Thin Films by the Moiré Method. (E) L. S. Palatnik, V. M. Kosevich, and A. I. Fedorenko. 12, 717 (1968) [175, 69 (1967)]
- KOSTERIN, E. A.**
X-Ray Analysis of the Structure of Nematic Liquid Crystals in Electric and Magnetic Fields by Means of the Distribution Function. (E) B. K. Vainshtein, I. G. Chistyakov, E. A. Kosterin, and V. M. Chaikovskii. 12, 405 (1967) [174, 341 (1967)]
- KOSTETSKII, B. I.**
Effect of Surface-Active Substances on the Dislocation Distribution in Fatigued Metals. (E) V. V. Shevelya and B. I. Kostetskii. 12, 836 (1968) [175, 1270 (1967)]
Development of Dislocation Arrays in Surface Layers of Metals under Certain Types of Loading. (E) B. I. Kostetskii and V. V. Shevelya. 12, 892 (1968) [175, 70 (1967)]
- KOSTYANOVSKII, R. G.**
The Structure of the Amide Group in β -Bromobenzoyl ethylenimine. (E) R. P. Shubina, L. O. Atovmjan, and R. G. Kostyanovskii. 12, 669 (1968) [175, 586 (1967)]
- KOSYKIN, V. D.**
Dependence of the Vibrational Deactivation of the Ionic Molecule on the Ratio of the Collision Time to the Period of Vibration. (E) N. A. Generalov and V. D. Kosykin. 12, 796 (1968) [175, 804 (1967)]
- KOVALEV, I. F.**
Integrated Intensities in the Infrared Absorption Spectra of Methylethoxysilanes $(\text{CH}_3)_2\text{Si}(\text{OC}_2\text{H}_5)_n$ ($n = 0, 1, 2, 3$). (E) V. A. Arbutova, I. F. Kovalev, E. N. Tikhomirova, M. G. Voronkov, and L. A. Zhagat. 12, 461 (1967) [174, 320 (1967)]
- KOVAL'SKII, L. V.**
Holography without a Reference Beam. (T/E) V. V. Aristov, V. L. Broude, L. V. Koval'skii, V. K. Polyanski, V. K. Polyanski, V. B. Timofeev, and V. Sh. Shekhtman. 12, 1035 (1968) [177, 65 (1967)]
- KOVROV, P. E.**
Magnetic Field Distribution in a Coaxial Plasma Injector. (E) P. E. Kovrov, A. I. Morozov, L. G. Tokarev, and G. Ya. Shchepkin. 12, 155 (1967) [172, 1305 (1967)]
- KOZLOV, N. A.**
One Possibility of Increasing the Q of the Resonator of a Neodymium Laser. (E) O. N. Voron'ko, N. A. Kozlov, A. A. Mak, B. G. Malinin, and A. I. Stepanov. 12, 252 (1967) [173, 542 (1967)]
- KRAGEL'SKII, I. V.**
Controlling the Adhesion Component of Friction. (E) E. A. Dukhovskoi, I. V. Kragel'skii, and A. A. Silin. 12, 730 (1968) [175, 560 (1967)]
Variation of Area of Contact of Solids on Coming into Extremely Close Proximity. (T) N. M. Mikhlin and I. V. Kragel'skii. 12, 981 (1968) [175, 1285 (1967)]
- KRAMER, E. N.**
The Structure of Meteors. (T) P. B. Babadzhanyan and E. N. Kramer. 12, 654 (1968) [175, 315 (1967)]
The Nature of Fragmentation in Meteoric Bodies. (E/T) P. B. Babadzhanyan and E. N. Kramer. 12, 1086 (1968) [177, 1043 (1967)]
- KRASNIKOV, V. A.**
Problem of a Hydrodynamical Approximation for the Green's Functions of a Superfluid Bose System. (T) V. A. Krasnikov. 12, 558 (1967) [174, 1037 (1967)]
- KRASOVSKII, N. N.**
Problem of Game-Theoretic Contact of Motions. (T) N. N. Krasovskii. 12, 210 (1967) [173, 535 (1967)]
A Problem of Motions Encounter. (T) N. N. Krasovskii and V. E. Tret'yakov. 12, 205 (1967) [173, 285 (1967)]
- KRASULIN, YU. L.**
Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zuev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shorshorov. 12, 500 (1967) [174, 76 (1967)]
- KRAVCHENKO, V. I.**
The Effect of Generation Self-cutoff in a Ruby Laser. (E) V. L. Broude, V. I. Kravchenko, P. P. Pogoretskii, E. N. Sal'nikov, and V. S. Soskin. 12, 214 (1967) [173, 64 (1967)]
- KRESIN, V. Z.**
Pair Correlations in Polycyclic Molecules. (E/T) V. Z. Kresin. 12, 1147 (1968) [177, 1306 (1967)]
- KRIPYAKOVICH, P. I.**
Crystal Structure of MoCoSi . (E) E. I. Gladyshevskii, P. I. Kripyakovich, and R. V. Skolozdra. 12, 755 (1968) [175, 1047 (1967)]
- KRISHTAL, M. A.**
Topography of the Distribution of the Nonequilibrium Concentration of Vacancies Associated with the Mutual Diffusion of Two Components in the Creep Process. (T) M. A. Krishtal and V. I. Strelkov. 12, 86 (1967) [172, 576 (1967)]
Strengthening of Metals by Decorating Dislocations with Surface-Active Impurities. (E) V. I. Likhtman, M. A. Krishtal, S. A. Golovin, and I. A. Goncharenko. 12, 167 (1967) [172, 826 (1967)]
- KRIVENKOV, YU. P.**
Coupling of Dynamic Production Models into Networks. (T) Yu. P. Krivenkov. 12, 540 (1967) [174, 1284 (1967)]
- KRIVSKII, I. YU.**
Possible Formulations of the Principle of Microcausality and Some of Their Consequences. (T) Yu. M. Lomsadze and I. Yu. Krivskii. 12, 239 (1967) [173, 312 (1967)]
- KROKHIN, O. N.**
Formation of a Long Spark in Air by Weakly Focused Laser Radiation. (E/T) N. G. Basov, V. A. Bolko, O. N. Krokhin, and G. V. Sklizkov. 12, 248 (1967) [173, 538 (1967)]

- KROPOTOV, L. D.**
Electron Paramagnetic Resonance of Vanadium and Chromium in CaF_2 . (E) M. M. Zaripov, V. S. Kropotov, L. D. Livanova, and V. G. Stepanov. 12, 348 (1967) 173, 1043 (1967)
- KROTOVA, N. A.**
Electron Emission during Vibro-Mechanical Treatment of Polymers. (E) A. M. Polyakov, Yu. F. Kurdukhov, N. K. Barambom, and N. A. Krotova. 12, 720 (1968) 175, 72 (1967)
- KUCHANOV, S. I.**
Motion of Particles Suspended in Turbulent Flow. (T) V. G. Levich and S. I. Kuchanov. 12, 546 (1967) 174, 763 (1967)
- Energy Dissipation in a Turbulent Gas Containing Suspended Particles.** (T) S. I. Kuchanov and V. G. Levich. 12, 549 (1967) 174, 1033 (1967)
- KUKHTIN, V. V.**
On Current Divergences. (T) L. Enkovskii, V. V. Kukhtin, I. Montval, and Nguyen Van Heu. 12, 874 (1968) 176, 298 (1967)
- KULEVSKII, L. A.**
Two-Photon Absorption Spectrum in CdS near the Fundamental Absorption Edge. (E/T) V. K. Konyukhov, L. A. Kulevskii, and A. M. Prokhorov. 12, 354 (1967) 173, 1048 (1967)
- KUNIN, I. A.**
Boundary-Value Problems in the Continuum Theory of Dislocations. (T) A. M. Vaisman and I. A. Kunin. 12, 395 (1967) 173, 1024 (1967)
- KUNIN, P. E.**
One Class of Adaptive Recognition Algorithms. (T) G. M. Adel'son-Vel'skii, P. E. Kunin, and A. A. Leman. 12, 208 (1967) 173, 532 (1967)
- KURDUBO, Yu. F.**
Electron Emission during Vibro-Mechanical Treatment of Polymers. (E) A. M. Polyakov, Yu. F. Kurdukhov, N. K. Barambom, and N. A. Krotova. 12, 720 (1968) 175, 72 (1967)
- KURDYUMOV, G. V.**
The Nature of the Kinetics of the Martensitic Transformation of Hot-Worked Austenite. (E/T) I. Ya. Georgieva, G. V. Kurdyumov, O. P. Maksimova, and V. V. Nemirovskii. 12, 368 (1967) 173, 1055 (1967)
- KURDYUMOV, S. P.**
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samarskii, L. A. Zaklyaz'minskii, P. P. Volosovich, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) 173, 808 (1967)
- KURDYUMOV, V. G.**
Dislocation Structure of Ordered Copper-Nickel-Zinc Alloys. (E) V. G. Kurdyumov and L. P. Chupatyova. 12, 164 (1967) 172, 823 (1967)
- Some Characteristics of the Dislocation Structure of Silicon Iron Single Crystals, Oriented for Slip Along the $\{111\}\{111\}$ Slip System.** (E) V. G. Kurdyumov, L. M. Morgulis, and L. M. Utevalskii. 12, 509 (1967) 174, 339 (1967)
- KUSHNIR, I. P.**
Dislocation Structure of Stressed Iron Microcrystals. (E) I. P. Kushnir. 12, 387 (1967) 173, 1306 (1967)
- KUZMAK, G. E.**
Optimal Transfer Flights between Close Nearly Circular Noncoplanar Orbits. (T) G. E. Kuzmak and N. I. Lavrenko. 12, 318 (1967) 173, 1273 (1967)
- KUZ'MIN, E. A.**
Crystal Structure of Potassium Bichromate $\text{K}_2\text{Cr}_2\text{O}_7$ (Lopezite). (E) E. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 12, 293 (1967) 173, 1068 (1967)
- KUZNETSOVA, R. I.**
Some Peculiarities in the Kinetics of High-Temperature Creep and Fracture in Thin Electrolytic Metal Films. (E/T) R. Ya. Pines and R. I. Kuznetsova. 12, 264 (1967) 173, 79 (1967)
- Load Endurance of Thin Electrolytic Copper Films under Longitudinal and Subsequent Transverse Loading.** (E) B. Ya. Pines and R. I. Kuznetsova. 12, 272 (1967) 173, 329 (1967)
- LANSHINA, L. V.**
Investigation of the Hyperacoustic Properties of Liquids by Means of a Helium-Neon Laser. (E/T) L. V. Lashina, Yu. G. Shoroshhev, and M. I. Shakhparonov. 12, 220 (1967) 173, 70 (1967)
- LARINA, T. B.**
Metal Fatigue. (T) T. B. Larina. 12, 1077 (1968) 177, 59 (1967)
- LASHKAREV, V. E.**
Spectral Dependence of the Photoionization of Sensitivity Centers in Cadmium Sulfide. (T/E) V. E. Lashkarev and A. A. Ptashchenko. 12, 42 (1967) 172, 77 (1967)
- LAVRENKO, N. I.**
Optimal Transfer Flights between Close Nearly Circular Noncoplanar Orbits. (T) G. E. Kuzmak and N. I. Lavrenko. 12, 318 (1967) 173, 1273 (1967)
- LAZAREV, B. G.**
Behavior of the Critical Current in Wires of Superconducting Niobium Alloys as a Function of Magnetic Field and Temperature. (E) B. G. Lazarev, L. S. Lazareva, and S. I. Goridov. 12, 1150 (1968) 177, 1310 (1967)
- LAZAREVA, L. S.**
Behavior of the Critical Current in Wires of Superconducting Niobium Alloys as a Function of Magnetic Field and Temperature. (E) B. G. Lazarev, L. S. Lazareva, and S. I. Goridov. 12, 1150 (1968) 177, 1310 (1967)
- LAZUKIN, V. N.**
Hyperfine Structure of the EPR Line with a g Factor -4.3 Due to Mn^{2+} in the Chalcoquin Glasses $\text{Ti}_2\text{SeAs}_2\text{Se}_3$, $\text{Ti}_2\text{SAs}_2\text{S}_3$, and $\text{Ti}_2\text{TeAs}_2\text{Te}_3$. (E) V. N. Lazukin and I. V. Chepeleva. 12, 606 (1967) 174, 1306 (1967)
- Hyperfine Structure of the Electron Paramagnetic Resonance Spectra of the Vanadyl Ion in Vanadium-Containing Glasses.** (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskikh. 12, 780 (1968) 175, 789 (1967)
- Electron Paramagnetic Resonance Study of the Mechanism of Electrical Conductivity in the Glasses of the Ternary System $\text{V}_2\text{O}_5\text{-P}_2\text{O}_5\text{-WO}_3$.** (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskikh. 12, 1046 (1968) 177, 310 (1967)
- LEBEDEVA, N. S.**
Polarization Effects in Coulomb Scattering of 4-MeV Neutrons by Copper, Lead, and Uranium. (E/T) G. V. Gorlov, N. S. Lebedeva, and V. M. Morozov. 12, 451 (1967) 174, 60 (1967)
- LEICHKIS, D. L.**
Influence of Vibration on the Crystallization of Cadmium. (E) D. L. Leichkis, N. V. Mikhailov, and P. A. Rebinder. 12, 908 (1968) 176, 564 (1967)
- LEIFMAN, L. Ya.**
A Problem of Allocation of Resources in Net Programming. (T) L. Ya. Leifman. 12, 672 (1968) 175, 44 (1967)
- LEMAN, A. A.**
One Class of Adaptive Recognition Algorithms. (T) G. M. Adel'son-Vel'skii, P. E. Kunin, and A. A. Leman. 12, 208 (1967) 173, 532 (1967)
- LENCHENKO, V. M.**
Energy Structure of Collision Cascade of Identical Particles in a Stopping Medium. (T) V. M. Lenchenko and S. V. Starodubtsev. 12, 45 (1967) 173, 80 (1967)
- LENSKAYA, S. V.**
The Relation between the "Spike" Extra Reflections in the Laue Patterns of Natural Diamonds and Their Optical Properties. (E) E. V. Sobolev, V. I. Lisolov, and S. V. Lenskaya. 12, 665 (1968) 175, 582 (1967)
- LENSKII, V. L.**
Regularization of Statistical Dynamics Problems for Automatic Control Systems. (T) V. V. Solodovnikov and V. L. Lenskii. 12, 128 (1967) 172, 1293 (1967)
- LEONAS, V. B.**
Interaction Potentials of H and He Atoms and H_2 Molecules. (E/T) Yu. N. Bolyaev and V. B. Leonas. 12, 233 (1967) 173, 306 (1967)

LEVENETS, N. P.

Reaction Zone Temperature during the Scavenging of Iron Melts by Gas-Oxygen Mixtures and by Air. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 512 (1967) [174, 566 (1967)]

Distribution of Impurities in Oxygen-Blown Metal. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 628 (1967) [174, 814 (1967)]

LEVICH, V. G.

Motion of Particles Suspended in Turbulent Flow. (T) V. G. Levich and S. I. Kuchanov. 12, 546 (1967) [174, 763 (1967)]

Energy Dissipation in a Turbulent Gas Containing Suspended Particles. (T) S. I. Kuchanov and V. G. Levich. 12, 549 (1967) [174, 1033 (1967)]

LEVIKOV, S. I.

Quasi-continuous Laser of a $\text{CaF}_2\text{-Dy}^{3+}$ Base with Pyrotechnic Excitation. (E) A. I. Bodreysova, A. A. Kaminskii, S. I. Levikov, and V. V. Osiko. 12, 507 (1967) [174, 337 (1967)]

LEVIN, E. A.

Destruction of Tubes by Explosion in Liquids under Pressure. (E) E. A. Levin and S. A. Lovlya. 12, 639 (1967) [174, 1063 (1967)]

LIBOV, V. S.

Relations between the Optical Characteristics of a Material and the Einstein Coefficients of Its Molecules in the Case of Condensed Media and Levels of Finite Width. (T) N. G. Bakshiev, O. P. Glin, and V. S. Libov. 12, 935 (1968) [176, 805 (1967)]

LIKHTMAN, V. I.

Strengthening of Metals by Decorating Dislocations with Surface-Active Impurities. (E) V. I. Likhtman, M. A. Krikshtal, S. A. Golovin, and I. A. Goncharenko. 12, 167 (1967) [172, 826 (1967)]

LISOVAN, V. I.

The Relation between the "Spike" Extra Reflections in Laue Patterns of Natural Diamonds and Their Optical Properties. (E) E. V. Sobolev, V. I. Lisovan, and S. V. Lenskaya. 12, 665 (1968) [175, 582 (1967)]

LITOV, Yu. N.

On the Disintegration of the Structure and Strength of Polymer Materials. (E) A. A. Vakulenko, Yu. N. Litov, and V. M. Chebanov. 12, 691 (1968) [177, 539 (1967)]

LITYAGINA, L. M.

X-Ray Diffraction Study of ZnF_2 Pressures up to 130 kbar and at Temperatures of 25 and 300°. (E/T) S. S. Kabalkina, L. F. Vereshchagin, and L. M. Lityagina. 12, 946 (1968) [176, 1044 (1967)]

LIVANOVA, L. D.

Electron Paramagnetic Resonance of Vanadium and Chromium in CaF_2 . (E) M. M. Zaripov, V. S. Kropotov, L. D. Livanova, and V. G. Stepanov. 12, 348 (1967) [173, 1043 (1967)]

LOGINOVA, R. G.

Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. (E) V. V. Postnikov, M. I. Ovsyannikov, R. G. Loginova, R. A. Rubtsova, T. N. Sergievskaya, and V. A. Tolomazov. 12, 822 (1968) [175, 817 (1967)]

LOMSADZE, Yu. M.

Possible Formations of the Principle of Microcausality and Some of Their Consequences. (T) Yu. M. Lomsadze and I. Yu. Krivskii. 12, 239 (1967) [173, 312 (1967)]

LOPUKHOV, G. A.

Reaction Zone Temperature during the Scavenging of Iron Melts by Gas-Oxygen Mixtures and by Air. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 512 (1967) [174, 566 (1967)]

Distribution of Impurities in Oxygen-Blown Metal. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 628 (1967) [174, 814 (1967)]

LOSEV, A. P.

Anisotropy of Optical Transitions in Metallochlorides and Chlorophyll. (E) A. N. Sechenko, K. N. Solov'ev, V. A. Maschenkov, S. F. Shkirman, and A. P. Losev. 12, 787 (1968) [175, 797 (1967)]

LOTOTSKII, B. Yu.

Thermal Processes in Thin Films. (T) Yu. M. Volokobinski, B. Yu. Lototskii, V. V. Pasyanov, and L. K. Chirkin. 12, 73 (1967) [172, 83 (1967)]

LOVLYA, S. A.

Destruction of Tubes by Explosion in Liquids under Pressure. (E) E. A. Levin and S. A. Lovlya. 12, 639 (1967) [174, 1063 (1967)]

LOZINSKII, M. G.

Development of Collective Recrystallization and Polyorganization of Silicon Iron in High-Temperature Fatigue Testing. (T/E) M. G. Lozinskii and A. N. Romanov. 12, 1158 (1968) [177, 1065 (1967)]

LUGOVOI, V. N.

Propagation of Wave Beams in Nonlinear Media. (T) V. N. Lugovoi. 12, 866 (1968) [176, 58 (1967)]

LUNDIN, A. G.

Proton Magnetic Resonance and Position of Hydrogen Atoms in Natural Edingtonite. (E/T) I. A. Belitskii, S. P. Gabuda, and A. G. Lundin. 12, 119 (1967) [172, 1318 (1967)]

LUSHNIKOV, V. G.

Electrolysis of Synthetic Quartz Containing a Nonstructural Impurity. (E) V. G. Lushnikov and V. E. Khadzhii. 12, 116 (1967) [172, 1072 (1967)]

LUTSET, M. O.

Boundary Conditions for the Navier-Stokes Equations in a Rarefied Gas. (T) R. G. Barantsev and M. O. Lutset. 12, 309 (1967) [173, 1021 (1967)]

LUTSIV, R. V.

Study of Solid Solutions in the HgTe-HgS and HgSe-HgS Systems. (E) F. F. Kharakhorn, V. M. Petrov, M. V. Pashkovskii, and R. V. Lutsiv. 12, 869 (1968) [176, 62 (1967)]

LYASHCHENKO, B. G.

Magnetic Moments and Ionic Charges of Components of Binary Alloys of Metals of the Iron Group. Strongly Nonideal Solid Solutions. (T) B. G. Lyashchenko. 12, 630 (1967) [174, 817 (1967)]

MAK, A. A.

One Possibility of Increasing the Q of the Resonator of a Neodymium Laser. (E) O. N. Voron'ko, N. A. Kozlov, A. A. Mak, B. G. Malinin, and A. I. Stepanov. 12, 252 (1967) [173, 542 (1967)]

Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Galaktionova, V. F. Egorova, V. S. Zhukova, A. A. Mak, and D. S. Prilezhaev. 12, 360 (1967) [173, 1284 (1967)]

MAKAROV, N. I.

Allowance for Nonideal Contact in Laser Welding of Different Materials. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 636 (1967) [174, 824 (1967)]

Effects of Peak Frequency in a Laser Pulse on the Heating of Metal Sheets. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 644 (1967) [174, 1068 (1967)]

MAKSIMOV, A. M.

A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheindlin, É. I. Asinovskii, V. V. Sychev, V. B. Zenkevich, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]

MAKSIMOV, Yu. A.

Superconductivity in the System $\text{Nb}_3\text{Al-Mo}_3\text{Al}$. (E) N. E. Alekseevskii, I. I. Kornilov, N. M. Matveeva, and Yu. A. Maksimov. 12, 275 (1967) [173, 553 (1967)]

MAKSIMOVA, O. P.

The Nature of the Kinetics of the Martensitic Transformation of Hot-Worked Austenite. (E/T) I. Ya. Georgieva, G. V. Kuryukov, O. P. Maksimova, and V. V. Nemirovskii. 12, 368 (1967) [173, 1055 (1967)]

Nucleation of Martensite in Iron-Nickel Alloys Showing Disruptive Transformation Kinetics. (E/T) O. P. Maksimova and V. V. Nemirovskii. 12, 1062 (1968) [177, 81 (1967)]

- MALDYBAEVA, É. Ya.**
Electromagnetic Waves in the General Theory of Relativity. (T) É. Ya. Malydyaeva. 12, 57 (1967) 172, 320 (1967)
- MALININ, B. G.**
One Possibility of Increasing the Q of the Resonator of a Neodymium Laser. (E) O. N. Voron'ko, N. A. Kozlov, A. A. Mak. B. G. Malinin, and A. I. Stepanov. 12, 252 (1967) 173, 542 (1967)
- MALYSHEV, V. A.**
Determination of the Regularity of Automata from Their Canonical Equations. (T) B. M. Kloss and V. A. Malyshev. 12, 14 (1967) 172, 543 (1967)
- Estimate of the Complexity of Loss-Free Electrical Line Simulation. (T) V. A. Malyshev. 12, 1000 (1968) 177, 288 (1967)
- MARCHENKO, V. M.**
Spectrum-Time Studies of $\text{CaF}_2\text{Sm}^{2+}$ Crystal Generation for Excitation by a Ruby Laser. (E) V. M. Marchenko and A. M. Prokhorov. 12, 1057 (1968) 177, 557 (1967)
- MARCOCHEV, V. M.**
Fracture Diagrams of Solids. (E) B. A. Drozdovskii, V. M. Markochev, and Ya. B. Fridman. 12, 622 (1967) 174, 807 (1967)
- MARYTSENKO, M. D.**
Fundamental Boundary Value Problems in Potential Theory for a Space with an Elliptic Slot. The Pressure Due to an Elliptic Die on an Elastic Half-Space. (T) M. D. Martynenko. 12, 914 (1968) 176, 53 (1967)
- MARTYNOV, E. D.**
Electron-Microscopic Examination of Chromium and Molybdenum Deformed under High Pressure. (E) E. D. Martynov, V. I. Treflov, S. A. Firatov, B. I. Beresnev, and Yu. N. Ryabinin. 12, 956 (1968) 176, 1276 (1967)
- MASHENKOV, V. A.**
Low-Temperature Polarization Spectra of Asymmetric Azabenzoporphyrins and Their Metal Derivatives. (E) A. N. Sevechenko, S. F. Shkirman, V. A. Mashenkov, and K. N. Solov'ev. 12, 710 (1968) 175, 545 (1967)
- Anisotropy of Optical Transitions in Metallochlorins and Chlorophyll. (E) A. N. Sevechenko, K. N. Solov'ev, V. A. Mashenkov, S. F. Shkirman, and A. P. Losev. 12, 787 (1968) 175, 797 (1967)
- MASHKOVA, E. S.**
Multiple Collisions in the Scattering of Ions by Crystals. (E) E. S. Mashkova and V. A. Molchanov. 12, 133 (1967) 172, 813 (1967)
- MATVEEVA, N. M.**
Superconductivity in the System $\text{Nb}_3\text{Al}-\text{Mo}_3\text{Al}$. (E) N. E. Alekseevskii, I. I. Kornilov, N. M. Matveeva, and Yu. A. Maksimov. 12, 275 (1967) 173, 553 (1967)
- MEDVEDEV, B. V.**
The Adiabatic Hypothesis in Axiomatic Field Theory. (T) B. V. Medvedev and M. K. Polivanov. 12, 1118 (1968) 177, 816 (1967)
- MEN', A. N.**
Group Theoretical Classification of the States of Pairs and Complexes of Paramagnetic Impurity Ions in Crystals. (T) S. V. Vonskovskii, V. I. Cherepanov, A. N. Men', and A. E. Nikiforov. 12, 570 (1967) 174, 783 (1967)
- MESHCHERYAKOV, V. A.**
Solution of Equations of the Chew-Low Type. (T) V. A. Meshcheryakov. 12, 593 (1967) 174, 1054 (1967)
- MIGUNOV, D. M.**
The Electrical Discharge as a Converter of Electrical Energy into Mechanical Energy. (T/E) V. V. Rzhavskii, N. I. Andrienko, D. M. Migunov, and Yu. I. Protasov. 12, 579 (1967) 174, 795 (1967)
- MIKHAILOV, N. V.**
Influence of Vibration on the Crystallization of Cadmium. (E) D. L. Leitch, N. V. Mikhailov, and P. A. Reinder. 12, 908 (1968) 176, 564 (1967)
- Distribution of Microcracks in Concrete. (T/E) V. G. Pashkovskii, N. V. Mikhailov, and P. A. Reinder. 12, 1065 (1968) 177, 314 (1967)
- MIKHAILOVSKII, I. M.**
Mechanical Strength of Tungsten Microcrystals. (E) R. I. Garber, Zh. I. Dranova, and I. M. Mikhailovskii. 12, 584 (1967) 174, 1044 (1967)
- MIKHALENKO, V. S.**
Effect of Deformation on the Angular Distribution of Annihilation Quanta in Nickel and Copper Alloys. (E) A. A. Adamenko, I. Ya. Dekhtyar, and V. S. Mikhaleenko. 12, 374 (1967) 173, 1291 (1967)
- Effect of Magnetic Transformations on the Shape of the Angular Distribution of γ Quanta from Positron-Electron Annihilation in Ferromagnetic Materials. (E) I. Ya. Dekhtyar, V. S. Mikhaleenko, and S. G. Sakharova. 12, 618 (1967) 174, 803 (1967)
- Influence of Plastic Deformation on the Mössbauer Effect in Fe-Ni Invar Alloys. (E/T) I. Ya. Dekhtyar, B. G. Egiazarov, L. M. Isakov, V. S. Mikhaleenko, and V. P. Romashko. 12, 727 (1968) 175, 556 (1967)
- MIKHIN, N. M.**
Variation of Area of Contact of Solids on Coming into Extremely Close Proximity. (T) N. M. Mikhin and I. V. Kragel'skii. 12, 981 (1968) 176, 1285 (1967)
- MINLOS, R. A.**
Phenomenon of Phase Separation at Low Temperatures in Certain Lattice Models of a Gas. (T) R. A. Minlos and Ya. G. Sinai. 12, 688 (1968) 175, 323 (1967)
- MIRKIN, I. L.**
Theory of Dislocations in the Two-Row Model of a Crystal. (T) A. A. Yudin and I. L. Mirkín. 12, 65 (1967) 172, 330 (1967)
- Physical Nature of the Hardening of Steels under the Influence of Light Pulses. (E) L. I. Mirkín and N. F. Pilipetski. 12, 89 (1967) 172, 580 (1967)
- MIRZADZHANZADE, A. Kh.**
The Differential Equations for the Filtration of a Gas-Liquid System Taking Account of Mass Transfer of Residual Water. (T) A. Kh. Mirzadzhanzade, Z. M. Akhtedov, and T. A. Samadov. 12, 930 (1968) 176, 1035 (1967)
- MISHENIN, V. I.**
Design of Invariant Communication and Measuring Devices. (E) B. N. Petrov, V. A. Viktorov, and V. I. Mishenin. 12, 1023 (1968) 172, 52 (1967)
- MITSKEVICH, N. V.**
Chronometric Invariance and the Problem of Gravitational Energy. (T) N. V. Mitskevich and José D. Mujica. 12, 939 (1968) 176, 809 (1967)
- MNYUKH, Yu. V.**
Crystal Growth in Polymorphic Transitions in Glutaric Acid and Hexachloroethane. (E) Yu. V. Mnyukh, N. I. Musaeu, and A. I. Kitagorodskii. 12, 409 (1967) 174, 345 (1967)
- MOISEEV, B. M.**
Complex Splitting of the Nuclear Magnetic Resonance Spectrum of a Two-Spin System. (T/E) B. M. Moiseev and L. I. Fedorov. 12, 806 (1968) 175, 1249 (1967)
- MOLCHANOV, V. A.**
Multiple Collisions in the Scattering of Ions by Crystals. (E) E. S. Mashkova and V. A. Molchanov. 12, 133 (1967) 172, 813 (1967)
- Effect of Thermal Vibrations of the Crystal Lattice on the Anisotropy of Sputtering and Ion-Electron Emission Coefficients of Single Crystals. (E) I. N. Evdokimov, V. A. Molchanov, D. D. Odintsov, and V. M. Chichorov. 12, 1050 (1968) 177, 550 (1967)
- MONIN, A. S.**
Equations for Finite Dimensional Probability Distributions of a Field of Turbulence. (T) A. S. Monin. 12, 1113 (1968) 177, 1036 (1967)
- MONTVAL, I.**
On Current Divergences. (T) L. Enkovskii, V. V. Kukhtin, I. Montval, and Nguyen Van Hieu. 12, 874 (1968) 176, 298 (1967)
- MORGULIS, L. M.**
Some Characteristics of the Dislocation Structure of Silicon Iron Single Crystals, Oriented for Slip Along the $\{111\}$ Slip System. (E) V. G. Kuryumov, L. M. Morgulis, and L. M. Uteviskii. 12, 509 (1967) 174, 339 (1967)

- MOROZOV, A. I.**
Magnetic Field Distribution in a Coaxial Plasma Injector. (E) P. E. Kovrov, A. I. Morozov, L. G. Tokarev, and G. Ya. Shepkin. 12, 155 (1967) 172, 1305 (1967)
- MOROZOV, V. M.**
Polarization Effects in Coulomb Scattering of 4-MeV Neutrons by Copper, Lead, and Uranium. (E/T) G. V. Gorlov, N. S. Lebedeva, and V. M. Morozov. 12, 451 (1967) 174, 60 (1967)
- MOSKALENKO, V. A.**
Electrodynamics of Two-Band Superconductors in the Neighborhood of the Upper Critical Field. (T) V. A. Moskalenko. 12, 256 (1967) 173, 546 (1967)
- Thermodynamic Properties of Superconductors with Nonmagnetic Impurities. Overlap of Energy Bands. (T) V. A. Moskalenko. 12, 877 (1968) 176, 301 (1967)
- MOSOLOV, P. P.**
Rectilinear Stationary Motions of a Viscoplastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 434 (1967) 174, 312 (1967)
- Rectilinear Motion of a Perfectly Plastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 441 (1967) 174, 541 (1967)
- MOZGOVAYA, L. A.**
Negative Photochemical Effect in Cadmium Sulfide. (E/T) V. A. Drozdov, L. A. Mozgovaya, and A. L. Rvachev. 12, 1038 (1968) 177, 68 (1967)
- MUJICA, JOSÉ D.**
Chromometric Lavalance and the Problem of Gravitational Energy. (T) N. V. Mityaevich and José D. Mujica. 12, 939 (1968) 176, 809 (1967)
- MURANEVICH, A. Kh.**
Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmyan, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Drem'in, A. Kh. Muranevich, and S. V. Pershin. 12, 173 (1967) 172, 1066 (1967)
- MUSAEV, N. I.**
Crystal Growth in Polymorphic Transitions in Glutaric Acid and Hexachloroethane. (E) Yu. V. Myuyukh, N. I. Musaev, and A. I. Kitaigorodskii. 12, 409 (1967) 174, 345 (1967)
- MUSATOV, V. V.**
Propagation of Unsteady Waves in a Rotating Channel of Constant Depth. (T) V. V. Musatov. 12, 428 (1967) 174, 309 (1967)
- MYASNIKOV, É. N.**
Calculation of the Energy of Molecular Excitons. (T) A. S. Davydov and É. N. Myasnikov. 12, 346 (1967) 173, 1040 (1967)
- MYASNIKOV, V. P.**
Rectilinear Stationary Motions of a Viscoplastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 434 (1967) 174, 312 (1967)
- Rectilinear Motion of a Perfectly Plastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 441 (1967) 174, 541 (1967)
- MYASNANKIN, YU. M.**
Relations on Surfaces of Discontinuity of Stress in Three-Dimensional Perfectly Rigid-Plastic Solids. (T) G. I. Bykovtsev, D. D. Ivlev, and Yu. M. Myasnankin. 12, 1167 (1968) 177, 1039 (1967)
- NAGORYNI, V. Ya.**
Fine Structure of the X-Ray Emission Bands of Elements of the Iron Transition Group. (E) V. V. Nemoshkalenko and V. Ya. Nagoryni. 12, 735 (1968) 175, 566 (1967)
- NECHVOLOD, N. K.**
Strengthening of Crystalline Substances by the Stepped Low-Temperature Creep Method. (E) I. A. Gindin, V. M. Godshaev, N. K. Nechvolod, and Ya. D. Starodubov. 12, 498 (1967) 174, 73 (1967)
- NEMIROVSKII, V. V.**
The Nature of the Kinetics of the Martensitic Transformation of Hot-Worked Austenite. (E/T) I. Ya. Georgieva, G. V. Kurdyumov, O. P. Maksimova, and V. V. Nemirovskii. 12, 368 (1967) 173, 1055 (1967)
- Nucleation of Martensite in Iron-Nickel Alloys Showing Disruptive Transformation Kinetics. (E/T) O. P. Maksimova and V. V. Nemirovskii. 12, 1062 (1968) 177, 81 (1967)
- NEMOSHKALENKO, V. V.**
Fine Structure of the X-Ray Emission Bands of Elements of the Iron Transition Group. (E) V. V. Nemoshkalenko and V. Ya. Nagoryni. 12, 735 (1968) 175, 566 (1967)
- NGUEN VAN HEU**
On Current Divergences. (T) L. Enkovski, V. V. Kukhtin, I. Montval, and Nguen Van Heu. 12, 874 (1968) 176, 298 (1967)
- Matrix Elements of Lorentz Transformations for a Unitary Representation. (T) Tao Wong-tyk and Nguen Van Heu. 12, 312 (1967) 173, 1281 (1967)
- NIKIFOROV, A. E.**
Group Theoretical Classification of the States of Pairs and Complexes of Paramagnetic Impurity Ions in Crystals. (T) S. V. Vonsovskii, V. I. Cherepanov, A. N. Men', and A. E. Nikiforov. 12, 570 (1967) 174, 783 (1967)
- NIKITIN, A. K.**
The Three-Dimensional Cauchy-Poisson Problem for Waves on the Surface of a Viscous Liquid of Finite Depth. (T) A. K. Nikitin and É. N. Potetyunko. 12, 422 (1967) 174, 50 (1967)
- NIKITIN, A. V.**
Crystal Structures of Synthetic Na₂Zn₂(Si₂O₇). (E) S. T. Amirov, A. V. Nikitin, V. V. Byukhin, and N. V. Belov. 12, 987 (1968) 177, 92 (1967)
- NIKOLAEV, V. I.**
Spin Relaxation of Iron in the Ferromagnetic Compounds MnSb and CrTe below the Curie Point. (E) S. S. Yakimov, V. Ya. Gamitskii, V. I. Nikolaev, and S. R. Rodin. 12, 1153 (1968) 177, 1313 (1967)
- NIKOLAEV, V. N.**
Frictional Properties of Rubber-like Polymers at High Temperatures under Vacuum. (E) A. I. El'kin and V. N. Nikolaev. 12, 384 (1967) 173, 1302 (1967)
- NIKOLAEVSKII, V. N.**
Relation between Plastic Volume and Shear Deformations and Shock Waves in Soft Soils. (T/E) V. N. Nikolaevskii. 12, 1031 (1968) 177, 542 (1967)
- NILENDER, YU. A.**
Determination of Stresses in Solids by the Polarized-Ultrasonic Frequency Method. (E) Yu. A. Nilender, G. A. Budenkov, and G. Ya. Pochtovik. 12, 641 (1967) 174, 1065 (1967)
- NOSOVA, G. I.**
Temperature Dependence of the Critical Shear Stress of Copper-Nickel-Cobalt Alloys. (E) G. I. Nosova and N. T. Travina. 12, 281 (1967) 173, 560 (1967)
- NOVIKOV, E. A.**
Kinetic Equations for a Vortex Field. (T) E. A. Novikov. 12, 1006 (1968) 177, 299 (1967)
- NOVOSIL'TSEVA, N. I.**
Kinetics of Fracture under Biaxial Stress. (E) Ya. B. Fridman, T. K. Zilova, and N. I. Novosil'tseva. 12, 518 (1967) 174, 572 (1967)
- ODINTSOV, D. D.**
Effect of Thermal Vibrations of the Crystal Lattice on the Anisotropy of Sputtering and Ion-Electron Emission Coefficients of Single Crystals. (E) I. N. Evdokimov, V. A. Molchanov, D. D. Odintsov, and V. M. Chicherov. 12, 1050 (1968) 177, 550 (1967)
- OKHOTSIMSKII, D. E.**
Optimum Strategy for Correction. (T) D. E. Okhotsimskii, V. A. Rysasin, and N. N. Chentsaov. 12, 675 (1968) 175, 47 (1967)
- OLEINIK, O. A.**
Solutions of the System of Equations of Boundary Layer Theory by the Method of Straight Lines. (T) O. A. Oleinik. 12, 525 (1967) 174, 1288 (1967)
- *System of Boundary Layer Equations for Axisymmetric Flow. (T) O. A. Oleinik. 12, 770 (1968) 175, 777 (1967)

- OSIKO, V. V.
Quasi-continuous Laser on a $\text{CaF}_2\text{-Dy}^{3+}$ Base with Pyro-
technic Excitation. (E) A. I. Bodretsova, A. A. Kaminskii,
S. I. Levikov, and V. V. Osiko. 12, 507 (1967) 174, 337
(1967)
- OSIPOV, YU. I.
Spectroscopic Investigation of Gas Discharge for Argon Ion-
Optical Lasers. (E) V. F. Kitaeva, Yu. I. Osipov, and N. N.
Sobolev. 12, 55 (1967) 172, 317 (1967)
- OTTENBERG, E. V.
Effect of Initial Crystallographic Orientation on the Recrys-
tallization Temperature of Wire Obtained from Molybdenum
Single Crystals. (E) E. M. Savitskii, G. S. Burkanov, N. N.
Bokareva, A. S. Grokhovskii, and E. V. Ottenberg. 12,
76 (1967) 172, 87 (1967)
- OVSEICHUK, E. A.
Superconducting Properties of Vanadium-Niobium Alloys. (E)
N. N. Sirota and E. A. Ovseichuk. 12, 516 (1967) 174, 570
(1967)
- OVSYANKIN, V. A.
Cooperative Luminescence Sensitization of Silver-Halide Salts
and Spectral Sensitization of Photographic Emulsions. (E)
V. V. Ovsyankin and P. P. Feofilov. 12, 573 (1967) 174, 787
(1967)
- OVSYANNIKOV, M. I.
Epitaxial Silicon Layers Obtained by Sublimation in Vacuum.
(E) V. V. Postnikov, M. I. Ovsyannikov, R. G. Loginova, R. A.
Ruksova, T. N. Sergievskaya, and V. A. Tolomasov. 12, 822
(1968) 175, 817 (1967)
- OVSYANNIKOVA, L. P.
Effect of the Shape of Electrodes and Poles of Quadrupole Lenses
on the Quality of the Image Produced. (T) L. P. Ovsyannikova
and S. Ya. Yavor. 12, 261 (1967) 173, 76 (1967)
- PADO, G. S.
Acoustoelectric Effect in CdSe under Constant Amplification of
Ultrasound by Electron Flow. (T/E) V. I. Pustovoi, V. L.
Baibakov, and G. S. Pado. 12, 576 (1967) 174, 791 (1967)
- PALATNIK, L. S.
Phase Diagrams and Structure of Some Semiconductor $\text{Al}_x\text{V}_{1-x}\text{VI}$
 III/IV Alloys. (E) L. S. Palatnik and E. I. Rogacheva. 12,
503 (1967) 174, 80 (1967)
- Study of Defects in Mutually Oriented Polycrystalline Bi-Sb
Thin Films by the Moiré Method. (E) L. S. Palatnik, V. M.
Kosevich, and A. I. Fedorenko. 12, 717 (1968) 175, 69
(1967)
- PARILIS, E. S.
A Model for the Reflection of Ions from a Single Crystal. (T)
V. M. Kivliss, E. S. Parilis, and N. Yu. Turaev. 12, 328
(1967) 173, 805 (1967)
- PARITSKAYA, L. N.
The Experimental Separation of the Frenkel and Kirkendall Ef-
fects. (E) Ya. E. Geguzin, Yu. I. Boiko, and L. N. Paritskaya.
12, 267 (1967) 173, 323 (1967)
- PASHKIN, S. V.
Plasma Ionization Instability in Crossed Fields. (E) I. Ya. Shipuk
and S. V. Pashkin. 12, 959 (1968) 176, 1278 (1967)
- PASHKOVSKII, M. V.
Study of Solid Solutions in the HgTe-HgS and HgSe-HgS Sys-
tems. (E) F. F. Kharakhorn, V. M. Petrov, M. V. Pashkov-
skii, and R. V. Lutsiv. 12, 869 (1968) 176, 62 (1967)
- PASHKOVSKI, V. G.
Distribution of Microcracks in Concrete. (T/E) V. G. Pash-
kovski, N. V. Mikhailev, and P. A. Rebinder. 12, 1065 (1968)
172, 314 (1967)
- PASYNKOV, V. V.
Thermal Processes in Thin Films. (T) Yu. M. Volokobinskii,
B. Yu. Lototskii, V. V. Pasyankov, and L. K. Chirkin. 12, 73
(1967) 172, 83 (1967)
- PAVLOV, P. V.
The Structure of Oxide Films Obtained by Oxygen Ion Bombard-
ment of a Silicon Surface. (E) P. V. Pavlov and E. V. Shitova.
12, 11 (1967) 172, 588 (1967)
- The Structure of Amorphous Germanium, Obtained by Argon
Ion Bombardment of the Crystalline Form. (E) P. V. Pavlov
and D. I. Tetel'baum. 12, 746 (1968) 175, 823 (1967)
- PEREL'MAN, T. L.
Automodel Solutions of the Problem Relating to the Recombina-
tion Decay of Plasma. (T) T. L. Perel'man and S. I. Anisimov.
12, 136 (1967) 172, 617 (1967)
- PEREPELTSIN, V. A.
Spontaneous Growth of Magnesium Oxide Single Crystal Whiskers.
(E) P. P. Budnikov, V. A. Perepeltin, D. B. Sandulov, and
V. K. Shurman. 12, 752 (1968) 175, 1045 (1967)
- PERSHIN, S. V.
Formation of a Wurtzite-like Modification of Boron Nitride in Shock
Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmian,
T. V. Bavina, Yu. G. Borod'ko, O. N. Brensov, A. N. Dremin, A. Kh.
Muranevich, and S. V. Pershin. 12, 173 (1967) 172, 1066 (1967)
- PETRINA, D. Ya.
Completeness of Perturbation Theory Amplitudes in Amplitude
Space. (T) D. Ya. Petrina. 12, 212 (1967) 173, 295 (1967)
- PETROV, B. N.
Design of Invariant Communication and Measuring Devices. (E)
B. N. Petrov, V. A. Viktorov, and V. I. Mishchenko. 12, 1023
(1968) 177, 52 (1967)
- PETROV, D. A.
Dendrite Growth Mechanism of Crystals with the Diamond Struc-
ture. (E/T) D. A. Petrov. 12, 1093 (1968) 177, 1075 (1967)
- PETROV, N. N.
Energy Spectrum of Electrons Emitted from a KCl Single Crystal
Bombarded with Helium Ions. (E) A. I. Kondrashev and
N. N. Petrov. 12, 217 (1967) 173, 67 (1967)
- PETROV, V. M.
Study of Solid Solutions in the HgTe-HgS and HgSe-HgS Sys-
tems. (E) F. F. Kharakhorn, V. M. Petrov, M. V. Pashkov-
skii, and R. V. Lutsiv. 12, 869 (1968) 176, 62 (1967)
- PETROVSKII, T. G.
Paramagnetic Resonance of Fluoroborate Glasses Containing
Cobalt and Nickel. (E) D. M. Yudin, G. A. Tsurikova, and
T. G. Petrovskii. 12, 337 (1967) 173, 815 (1967)
- PETROVYKH, N. V.
Hyperfine Structure of the Electron Paramagnetic Resonance
Spectra of the Vanadyl Ion in Vanadium-Containing Glass. (E)
L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovykh. 12, 780
(1968) 175, 789 (1967)
- Electron Paramagnetic Resonance Study of the Mechanism of
Electrical Conductivity in the Glasses of the Ternary System
 $\text{V}_2\text{O}_5\text{-P}_2\text{O}_5\text{-WO}_3$. (E) L. D. Bogomolova, V. N. Lazukin, and
N. V. Petrovykh. 12, 1046 (1968) 177, 310 (1967)
- PETVIAHSHVILI, V. I.
Nonlinear Drift Waves in a Plasma. (T) V. I. Petviashvili. 12,
456 (1967) 174, 66 (1967)
- PILIPETSKII, N. F.
Physical Nature of the Hardening of Steels under the Influence
of Light Pulses. (E) L. I. Mirkin and N. F. Pilipetski. 12,
89 (1967) 172, 580 (1967)
- PIMENOV, YU. D.
Spectral Evidence of Interaction between Organic Molecules and
the Surface of a TiH Hole Semiconductor. (E) Yu. D. Pimenov.
12, 883 (1968) 176, 556 (1967)
- PIMENOV, YU. P.
Two-Photon Absorption in $\text{CaF}_2\text{Ho}^{3+}$ Crystals. (E/T) B. V.
Ershov, Yu. P. Pimenov, A. M. Prokhorov, and V. B. Fedorov.
12, 47 (1967) 172, 309 (1967)
- PINES, B. Ya.
Some Peculiarities in the Kinetics of High-Temperature Creep
and Fracture in Thin Electrolytic Metal Films. (E/T) B. Ya.
Pines and R. I. Kuznetsova. 12, 264 (1967) 173, 79 (1967)
- Load Endurance of Thin Electrolytic Copper Films under Longi-
tudinal and Subsequent Transverse Loading. (E) R. Ya. Pines
and R. I. Kuznetsova. 12, 272 (1967) 173, 329 (1967)
- PIRUMOV, U. G.
Calculation of the Flow in a Laval Nozzle. (T) U. G. Pirumov.
12, 857 (1968) 176, 287 (1967)

- PISARENKO, V. G.
Dispersion Sum Rules in a Static Model. (T) V. G. Pisarenko. 12, 707 (1968) [175, 331 (1967)]
- PISTOL'KORS, A. A.
Resolving Power of a Hologram. (E/T) A. A. Pistol'kors. 12, 79 (1967) [175, 334 (1967)]
- Theory of the Holographic Microscope. (T) A. A. Pistol'kors. 12, 966 (1968) [175, 816 (1967)]
- PLIOTNIKOV, V. I.
Optimal Control of Systems with Distributed Parameters. (T) V. I. Plotnikov. 12, 765 (1968) [175, 1238 (1967)]
- POBEDRYA, B. E.
The Stress-Strain Relation in Nonlinear Viscous Elasticity. (T) B. E. Pobedrya. 12, 287 (1967) [173, 62 (1967)]
- POCHTOVIK, G. Ya.
Determination of Stresses in Solids by the Polarized-Ultrasonic Frequency Method. (E) Yu. A. Nilender, G. A. Budenkov, and G. Ya. Pochtovik. 12, 641 (1967) [174, 1065 (1967)]
- PODSTRIGACH, Ya. S.
An Extremum Problem in Thermoelasticity for an Infinite Cylindrical Shell. (T) É. I. Grigolyuk, Ya. I. Burak, and Ya. S. Podstrigach. 12, 521 (1967) [174, 534 (1967)]
- POGORETSKII, P. P.
The Effect of Generation Self-cutoff in a Ruby Laser. (E) V. L. Broute, V. I. Kravchenko, P. P. Pogoretskii, E. N. Sal'kova, and M. S. Soskin. 12, 214 (1967) [173, 64 (1967)]
- POKROVSKII, L. A.
Irreversible Processes in a System with Internal Rotations. (T) L. A. Pokrovskii. 12, 1135 (1968) [177, 1054 (1967)]
- POKROVSKII, N. L.
Surface Tension of Melts Belonging to the Tin-Gold System. (E) N. L. Pokrovskii, P. P. Pugachevich, and Kh. I. Bragimov. 12, 170 (1967) [172, 829 (1967)]
- POLIVANOV, M. K.
The Adiabatic Hypothesis in Axiomatic Field Theory. (T) B. V. Medvedev and M. K. Polivanov. 12, 1118 (1968) [177, 816 (1967)]
- POLYAKOV, A. M.
Electron Emission during Vibro-Mechanical Treatment of Polymers. (E) A. M. Polyakov, Yu. F. Kurdubov, N. K. Baramboim, and N. A. Krotova. 12, 720 (1968) [175, 72 (1967)]
- POLYAKOV, E. V.
Measuring the Compressibility of Gases by the Displacement Method. Nitrogen Compressibility at Pressures Up to 10,000 atm and Temperatures to 400°. (E) D. S. Tsiklis and E. V. Polyakov. 12, 901 (1968) [176, 308 (1967)]
- POLYANSKII, V. K.
Holography without a Reference Beam. (T/E) V. V. Aristov, V. L. Broute, L. V. Koval'skii, V. K. Polyanskii, V. B. Timofeev, and V. Sh. Shekhtman. 12, 1035 (1968) [177, 65 (1967)]
- POPOV, Yu. M.
Possibility of Modulating the Radiation of a Semiconductor Laser by Heating the Current Carriers. (T) N. G. Basov, Yu. M. Popov, and A. V. Uspekenskii. 12, 343 (1967) [173, 1036 (1967)]
- POPOV, Yu. P.
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samarskii, L. A. Zaklyaz'minskii, P. P. Volosevich, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]
- POSPELOVA, R. V.
Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys Fe(Pd, Pt)_{1-x}. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorov, R. Z. Abdulov, and R. V. Pospelova. 12, 974 (1968) [176, 1056 (1967)]
- POSTNIKOV, V. V.
Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. (E) V. V. Postnikov, M. I. Ovsyannikov, R. G. Logina, R. A. Rubtsova, T. N. Sergievskaya, and V. A. Tolmashov. 12, 822 (1968) [175, 817 (1967)]
- POTAPOV, A. P.
Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. (E) Ya. S. Shar, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko. 12, 793 (1968) [175, 804 (1967)]
- POTEKHIN, B. A.
The ΔE Effect and Antiferromagnetism in Iron-Manganese Alloys. (E) I. N. Bogachev, V. F. Egorov, and B. A. Potekhin. 12, 377 (1967) [173, 1295 (1967)]
- POTETIYUNKO, É. N.
The Three-Dimensional Cauchy-Poisson Problem for Waves on the Surface of a Viscous Liquid of Finite Depth. (T) A. K. Nikitin and É. N. Potetyunko. 12, 422 (1967) [174, 50 (1967)]
- PRILEZHAEV, D. S.
Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Galaktionova, V. F. Egorova, V. S. Zubkova, A. A. Mak, and D. S. Prilezhaev. 12, 360 (1967) [173, 1284 (1967)]
- PROKHOROV, A. D.
Isotopic Hyperfine Structure of the EPR Spectrum of Cu^{2+} in ZnWO_4 . (E) A. A. Galkin, A. D. Prokhorov, B. A. Tsintsadze, and V. A. Shapovalov. 12, 236 (1967) [173, 309 (1967)]
- PROKHOROV, A. M.
Two-Photon Absorption in $\text{CaF}_2:\text{Ho}^{3+}$ Crystals. (E/T) B. V. Ershov, Yu. P. Pimenov, A. M. Prokhorov, and V. B. Fedorov. 12, 47 (1967) [172, 309 (1967)]
- Two-Photon Absorption Spectrum in CaS near the Fundamental Absorption Edge. (E/T) V. K. Konyukhov, L. A. Kulevskaya, and A. M. Prokhorov. 12, 354 (1967) [173, 1048 (1967)]
- Multiphoton Excitation of Organic Molecules. (E) A. M. Prokhorov, V. D. Shigirin, and G. P. Shipilov. 12, 783 (1968) [175, 793 (1967)]
- Spectrum-Time Studies of $\text{CaF}_2:\text{Sm}^{2+}$ Crystal Generation for Excitation by a Ruby Laser. (E) V. M. Marchenko and A. M. Prokhorov. 12, 1057 (1968) [177, 557 (1967)]
- PROKOSHCHIN, D. A.
Temperature Dependence of the Diffusion Mobility of Metals. (E/T) D. A. Prokoshchin and E. V. Vasil'eva. 12, 1162 (1968) [177, 1069 (1967)]
- PROPOI, A. I.
Synthesis of Optimal-in-the-Mean Automatic Systems. (T) A. I. Propoi and Ya. Z. Tsypkin. 12, 768 (1968) [175, 1242 (1967)]
- PROTASOV, Yu. I.
The Electrical Discharge as a Converter of Electrical Energy into Mechanical Energy. (T/E) V. V. Rzhavskii, N. I. Andrienko, D. M. Mignunov, and Yu. I. Protasov. 12, 579 (1967) [174, 795 (1967)]
- PROKOSHCHIN, D. A.
Effect of Electron Bombardment on the Mechanical Properties of High-Strength Steel. (E) B. A. Prusakov, D. A. Prokoshchin, L. N. Bystron, and L. I. Ivanov. 12, 912 (1968) [176, 568 (1967)]
- PRUSAKOV, B. A.
Effect of Electron Bombardment on the Mechanical Properties of High-Strength Steel. (E) B. A. Prusakov, D. A. Prokoshchin, L. N. Bystron, and L. I. Ivanov. 12, 912 (1968) [176, 568 (1967)]
- PSHENICHNOV, Yu. P.
Study of Etch Figures on Cadmium Single Crystals. (E) Yu. P. Pshenichnov. 12, 633 (1967) [174, 821 (1967)]
- PTASCHENKO, A. A.
Spectral Dependence of the Photoionization of Sensitivity Centers in Cadmium Sulfide. (T/E) V. E. Lashkarev and A. A. Ptashchenko. 12, 42 (1967) [172, 77 (1967)]
- PUGACHEV, V. S.
Optimum Training Systems. (T) V. S. Pugachev. 12, 762 (1968) [175, 1022 (1967)]
- Optimal Training Algorithms for Automatic Systems with Nonideal Trainers. (T) V. S. Pugachev. 12, 125 (1967) [172, 1039 (1967)]
- PUGACHEVICH, P. P.
Surface Tension of Melts Belonging to the Tin-Gold System. (E) N. L. Pokrovskii, P. P. Pugachevich, and Kh. I. Bragimov. 12, 170 (1967) [172, 829 (1967)]

- PUSTOVOIT, V. I.**
Acoustoelectric Effect in CdSe under Constant Amplification of Ultrasound by Electron Flow. (T/E) V. I. Pustovoi, V. I. Babakova, and G. S. Pado. 12, 576 (1967) [174, 791 (1967)]
- RAEVSKI, I. I.**
Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. (E) N. E. Alekseevskii, O. S. Ivanov, I. I. Ravevskii, and N. V. Stepanov. 12, 896 (1968) [176, 305 (1967)]
- RASSTVETAIEVA, I.**
Crystal Structure of Vinogradovite $\text{Na}_2\text{Ti}_2\text{Si}_2\text{O}_{12}(\text{Si}_2\text{O}_6)_2 \cdot n\text{H}_2\text{O}$. (E) R. K. Rastvetseva, V. I. Simonov, and N. V. Belov. 12, 1090 (1968) [177, 832 (1967)]
- RAVIN, V. S.**
A Steady-State Heat Conduction Problem. (T) V. S. Ravin. 12, 561 (1967) [174, 1041 (1967)]
- REBINDER, P. A.**
Influence of Vibration on the Crystallization of Cadmium. (E) D. L. Leichik, N. V. Mikhailov, and P. A. Rebinder. 12, 908 (1968) [176, 564 (1967)]
Distribution of Microcracks in Concrete. (T/E) V. G. Pashkovskii, N. V. Mikhailov, and P. A. Rebinder. 12, 1065 (1968) [177, 314 (1967)]
- RODIN, S. R.**
Spin Relaxation of Iron in the Ferromagnetic Compounds MnSb and CrTe below the Curie Point. (E) S. S. Yakimov, V. Ya. Gamlitiskii, V. I. Nikolaev, and S. R. Rodin. 12, 1153 (1968) [177, 1313 (1967)]
- ROGACHEVA, E. I.**
Phase Diagrams and Structure of Some Semiconductor $\text{Al}_x\text{Ga}_{1-x}\text{As}$ Alloys. (E) L. S. Palatnik and E. I. Rogacheva. 12, 503 (1967) [174, 80 (1967)]
- ROMANOV, A. N.**
Development of Collective Recrystallization and Polygonization of Silicon Iron in High-Temperature Fatigue Testing. (T/E) M. G. Lozinskii and A. N. Romanov. 12, 1158 (1968) [177, 1065 (1967)]
- ROMASHKO, V. P.**
Influence of Plastic Deformation on the Mossbauer Effect in Fe-Ni Invar Alloys. (E/T) I. Ya. Dekhtyar, B. G. Egiazarov, L. M. Isakov, V. S. Mikhailenkov, and V. P. Romashko. 12, 727 (1968) [175, 556 (1967)]
- RUBINOV, V. M.**
Anomalous Photoelectric Effect in Monochromatic Light. (E) É. I. Adirovich, V. M. Rubinov, and Yu. M. Yubov. 12, 477 (1967) [174, 545 (1967)]
- RUBTSOVA, R. A.**
Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. (E) V. V. Postnikov, M. I. Ovsyannikov, R. G. Loginova, R. A. Rubtsova, T. N. Sergievskaya, and V. A. Tolomasaev. 12, 822 (1968) [175, 817 (1967)]
- RUDO, Yu. G.**
Green's Function Method in the Ising Model. (T) Yu. G. Rudoi. 12, 437 (1967) [174, 316 (1967)]
- RUDZIKAS, Z. B.**
Permutation Groups of the Representations of the Groups G_2 and S_{12} . (T) S. I. Alishauskas, Z. B. Rudzikas, and A. P. Yutis. 12, 23 (1967) [172, 58 (1967)]
- RUSOV, G. I.**
Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-Co System. (E) L. V. Kirenskii, S. G. Rusova, G. I. Rusov, and N. I. Sivkov. 12, 977 (1968) [176, 1282 (1967)]
- RUSOVA, S. G.**
Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-Co System. (E) L. V. Kirenskii, S. G. Rusova, G. I. Rusov, and N. I. Sivkov. 12, 977 (1968) [176, 1282 (1967)]
- RUTKOVSKI, V. Yu.**
Synthesis of Algorithms for Changing Adjustable Coefficients in Self-Adaptive Control Systems with a Model. (T) S. D. Zemlyakov and V. Yu. Rutkovskii. 12, 418 (1967) [174, 47 (1967)]
- RVACHEV, A. L.**
Negative Photochemical Effect in Cadmium Sulfide. (E/T) V. A. Drozdov, L. A. Mozgovaya, and A. L. Rvachev. 12, 1038 (1968) [177, 68 (1967)]
- RYABININ, Yu. N.**
Electron-Microscopic Examination of Chromium and Molybdenum Deformed under High Pressure. (E) E. D. Martynov, V. I. Treilov, S. A. Firstov, B. I. Bereznev, and Yu. N. Ryabinin. 12, 856 (1968) [176, 1276 (1967)]
- RYABOV, V. A.**
Deposition of a Coating on a Moving Glass Rod. (E/T) B. V. Deryagin, P. S. Kireev, V. A. Ryabov, and D. V. Fedoseev. 12, 176 (1967) [172, 1312 (1967)]
- RYASIN, V. A.**
Optimum Strategy for Correction. (T) D. E. Okhotsimskii, V. A. Rysin, and N. N. Chentsov. 12, 675 (1968) [175, 47 (1967)]
- RYAZANOV, E. V.**
Some Particular Solutions of the Equations Describing Axially Symmetric Motion of a Gravitating Rarefied Plasma. (T) E. V. Ryzanov. 12, 684 (1968) [175, 309 (1967)]
Pulsations of a Rotating Cylinder of Plasma at Zero Temperature Gradient. (T) E. V. Ryzanov. 12, 686 (1968) [175, 542 (1967)]
Exact Solutions of Equations Describing the Motion of a Gravitating Gas with Homogeneous Deformations and Transverse Velocity Components. (T) E. V. Ryzanov. 12, 743 (1968) [175, 774 (1967)]
- RYKALIN, N. N.**
Effects of Peak Frequency in a Laser Pulse on the Heating of Metal Sheets. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 644 (1967) [174, 1068 (1967)]
Allowance for Nonideal Contact in Laser Welding of Different Materials. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 636 (1967) [174, 824 (1967)]
Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zuev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shorshorov. 12, 500 (1967) [174, 76 (1967)]
- RYUTOV, D. D.**
Raman Scattering of Ultrahigh-Frequency Radiation by Ion-Acoustic Vibrations of a Confined Plasma. (T) D. D. Ryutov. 12, 223 (1967) [173, 73 (1967)]
- RYZHOV, O. S.**
Damping of Perturbations Produced by a Solid of Revolution in a Viscous Heat-Conducting Supersonic Gas Flow. (T) V. N. Diesperov and O. S. Ryzhov. 12, 651 (1968) [175, 51 (1967)]
- RYZHOV, Yu. A.**
Energy Exchange in the Interaction of Atoms with the Surface of an Ideal Crystal. (T) Yu. A. Ryzhov and D. S. Strizhenov. 12, 158 (1967) [172, 1309 (1967)]
- RZHEVSKII, V. V.**
The Electrical Discharge as a Converter of Electrical Energy into Mechanical Energy. (T/E) V. V. Rzhnevskii, N. I. Andrienko, D. M. Migunov, and Yu. I. Protasov. 12, 579 (1967) [174, 795 (1967)]
- SAKHAROV, A. D.**
Vacuum Quantum Fluctuations in a Curved Space and the Theory of Gravitation. (T) A. D. Sakharov. 12, 1040 (1968) [177, 70 (1967)]
- SAKHAROVA, S. G.**
Effect of Magnetic Transformations on the Shape of the Angular Distribution of γ Quanta from Positron-Electron Annihilation in Ferromagnetic Materials. (E) I. Ya. Dekhtyar, V. S. Mikhailenkov, and S. G. Sakharova. 12, 618 (1967) [174, 803 (1967)]
- SAL'KOVA, E. N.**
The Effect of Generation Self-cutoff in a Ruby Laser. (E) V. L. Broude, V. I. Kravchenko, P. P. Pogoretaki, E. N. Sal'kova, and M. S. Soskin. 12, 214 (1967) [173, 64 (1967)]
- SAMARIN, A. M.**
Structural Transitions in Iron-Carbon Melts. (E/T) E. S. Filippov, V. K. Grigorovich, and A. M. Samarin. 12, 284 (1967) [173, 564 (1967)]

- Reaction Zone Temperature during the Scavenging of Iron Melts by Gas-Oxygen Mixtures and by Air. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 512 (1967) [174, 566 (1967)]
- Distribution of Impurities in Oxygen-Blown Metal. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 628 (1967) [174, 814 (1967)]
- SAMARSKII, A. A.**
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magnetohydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samarskii, L. A. Zaklyaz'minskii, P. P. Volosovitch, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]
- SAMEDOV, T. A.**
The Differential Equations for the Filtration of a Gas-Liquid System Taking Account of Mass Transfer of Residual Water. (T) A. Kh. Mirzadzhanzade, Z. M. Akhtedov, and T. A. Same-dov. 12, 930 (1968) [176, 1035 (1967)]
- SAMUS', I. D.**
The Crystal Structure of Trivalent Cobalt Amines with Intra-spherical Thiocyanate Group. (E/T) I. D. Samus' and N. V. Belov. 12, 195 (1967) [173, 83 (1967)]
- SANDITOV, D. S.**
The Nature of the Deformation of Inorganic Glasses during Microindentation. (E) G. M. Bartenev and D. S. Sanditov. 12, 889 (1968) [176, 66 (1967)]
- SANDULOV, D. B.**
Spontaneous Growth of Magnesium Oxide Single Crystal Whiskers. (E) P. P. Budnikov, V. A. Perepelitsin, D. B. Sandulov, and V. K. Sturman. 12, 752 (1968) [175, 1045 (1967)]
- SANNIKOV, S. S.**
A Realization of of Infinite-Dimensional Representations of the Rotation Group with Complex Spin by Entire Functions. (T) S. S. Sannikov. 12, 832 (1968) [176, 801 (1967)]
- SAVEL'EV, V. A.**
Experimental Study of the Limits of Applicability of Buger's Law for the Description of the Attenuation of Narrow Collimated Light Beams in Dispersive Media. (E) V. E. Zuev, M. V. Kabanov, and V. A. Savel'ev. 12, 704 (1968) [175, 327 (1967)]
- SAVIN, M. G.**
Electromagnetic Potentials in Gyrotropic Media. (T) D. N. Chetaev and M. G. Savin. 12, 564 (1967) [174, 1296 (1967)]
- SAVITSKAYA, L. K.**
New Data on the Embrittlement of Metals by Liquid Melts. (E) A. P. Savitskii and L. K. Savitskaya. 12, 647 (1967) [174, 1072 (1967)]
- SAVITSKII, A. P.**
New Data on the Embrittlement of Metals by Liquid Melts. (E) A. P. Savitskii and L. K. Savitskaya. 12, 647 (1967) [174, 1072 (1967)]
- SAVITSKII, E. M.**
Effect of Initial Crystallographic Orientation on the Recrystallization Temperature of Wire Obtained from Molybdenum Single Crystals. (E) E. M. Savitskii, G. S. Burkanov, N. N. Bokareva, A. S. Grokhochinskii, and E. V. Ottenberg. 12, 76 (1967) [172, 87 (1967)]
- SELISKII, Ya. P.**
Effects of Atomic Ordering in Ternary Solid Solutions Based on Ni₃Fe Alloyed with Group VI Elements, Cr, Mo, and W. (E) I. L. Eganyan and Ya. P. Seliskii. 12, 269 (1967) [173, 325 (1967)]
- SERGEVSKAYA, T. N.**
Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. (E) V. V. Postnikov, M. I. Ovsyannikov, R. G. Lognova, R. A. Rubtsova, T. N. Sergevskaya, and V. A. Tolomasov. 12, 822 (1968) [175, 817 (1967)]
- SEVCHENKO, A. N.**
Problem of Classifying the Electronic States of Uramyl Compounds. (E/T) L. V. Volod'ko, A. N. Seuchenko, and D. S. Umreiko. 12, 153 (1967) [172, 1303 (1967)]
- Low-Temperature Polarization Spectra of Asymmetric Aza-Benzoporphyrins and Their Metal Derivatives. (E) A. N. Seuchenko, S. F. Shkhrman, V. A. Maschenkov, and K. N. Solov'ev. 12, 710 (1968) [175, 545 (1967)]
- Anisotropy of Optical Transitions in Metallochlorins and Chlorophyll. (E) A. N. Seuchenko, K. N. Solov'ev, V. A. Maschenkov, S. F. Shkhrman, and A. P. Losev. 12, 787 (1968) [175, 797 (1967)]
- SHAKHPARONOV, M. I.**
Investigation of the Hyperacoustic Properties of Liquids by Means of a Helium-Neon Laser. (E/T) L. V. Lashina, Yu. G. Shoroshov, and M. I. Shakhparonov. 12, 220 (1967) [173, 70 (1967)]
- Feasibility of Investigating the Acoustical Properties of Liquids in the Frequency Range 10^3 to 10^8 cps from Data on the Scattered-Light Diagram. (T/E) M. I. Shakhparonov. 12, 459 (1967) [174, 69 (1967)]
- SHAKIROV, N.**
Relaxation of Anomalous Large Photo-Voltages in Cadmium Telluride Films. (E) E. I. Adirovich and N. Shakirov. 12, 226 (1967) [173, 298 (1967)]
- SHAL'NEV, K. K.**
The Mechanism Responsible for the Adhesion of a Fluid Jet to the Wall of a Fluid Amplifier - The Coanda Effect. (E) K. K. Shal'nev, B. A. Chernyavskii, and Yu. S. Demidov. 12, 680 (1968) [175, 55 (1967)]
- SHAPOVALOV, V. A.**
Isotopic Hyperfine Structure of the EPR Spectrum of Cu²⁺ in ZnWO₄. (E) A. A. Galkin, A. D. Prokhorov, G. A. Tsintsadze, and V. A. Shapovalov. 12, 236 (1967) [173, 309 (1967)]
- SHCHEPKIN, G. Ya.**
Magnetic Field Distribution in a Coaxial Plasma Injector. (E) P. E. Kovrov, A. I. Morozov, L. G. Tokarev, and G. Ya. Shchepkin. 12, 155 (1967) [172, 1305 (1967)]
- SHEFTER, G. M.**
Equations for Short Waves in a Viscous Heat-Conducting Gas. (T) G. M. Shefter. 12, 297 (1967) [173, 785 (1967)]
- SHEINDLIN, A. E.**
A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheindlin, E. I. Asinovskii, V. V. Sychev, V. B. Zenkevich, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]
- SHEKHTMAN, V. Sh.**
Holography without a Reference Beam. (T/E) V. V. Aristov, V. L. Broude, L. V. Koval'skii, V. K. Polyanski, V. B. Timofeev, and V. Sh. Shekhtman. 12, 1035 (1968) [177, 65 (1967)]
- SHELEST, A. V.**
The Irreversible Evolution of a Dynamical System Interacting with a Statistical Ensemble. (T) A. V. Shelest. 12, 259 (1967) [173, 550 (1967)]
- SHERSTYUK, A. I.**
EPR Investigation of Gallium Glass. (T/E) D. M. Yudin, A. I. Sherstyuk, and T. S. Tsakhomskaya. 12, 146 (1967) [172, 1063 (1967)]
- SHEVELYA, V. V.**
Effect of Surface-Active Substances on the Dislocation Distribution in Fatigued Metals. (E) V. V. Shevelya and B. I. Kostetskii. 12, 836 (1968) [175, 1270 (1967)]
- Development of Dislocation Arrays in Surface Layers of Metals under Certain Types of Loading. (E) B. I. Kostetskii and V. V. Shevelya. 12, 892 (1968) [176, 70 (1967)]
- SHIBAIEVA, R. P.**
The Structure of the Amide Group in p-Bromobenzoylethylamine. (E) R. P. Shibaieva, L. O. Atomyan, and R. G. Kostyanovskii. 12, 669 (1968) [175, 586 (1967)]
- SHIFRIN, E. G.**
The Direct Problem of Plane Symmetrical Flow with Detached Shock Wave about a Smooth Convex Profile. (T) E. G. Shifrin. 12, 4 (1967) [172, 550 (1967)]
- One Condition for the Breakdown of the Region of Continuous Supersonic Flow in the Flow around a Convex Profile with a Detached Shock Wave. (T) E. G. Shifrin. 12, 924 (1968) [176, 797 (1967)]

- SHIGORIN, V. D.
Multiphoton Excitation of Organic Molecules. (E) A. M. Prokhorov, V. D. Shigorin, and G. P. Shipulo. 12, 783 (1968) [175, 793 (1967)]
- SHIKIN, I. S.
A Uniform Axisymmetrical Cosmological Model in the Ultra-relativistic Case. (T) I. S. Shikin. 12, 950 (1968) [176, 1048 (1967)]
- SHIMELEVICH, Yu. S.
Possibility of Demonstrating the Migration of Uranium and Its Decay Products in Minerals. (E) I. G. Berzina, A. N. Stolyarova, G. N. Flerov, and Yu. S. Shimelevich. 12, 1155 (1968) [177, 1062 (1967)]
- SHIPUK, I. Ya.
Plasma Ionization Instability in Crossed Fields. (E) I. Ya. Shipuk and S. V. Pashkin. 12, 959 (1968) [176, 1278 (1967)]
- SHIPULO, G. P.
Multiphoton Excitation of Organic Molecules. (E) A. M. Prokhorov, V. D. Shigorin, and G. P. Shipulo. 12, 783 (1968) [175, 793 (1967)]
- SHIROKOV, M. F.
Momentum and Energy of Gravitational Waves. (T) M. F. Shirokov and L. I. Bud'ko. 12, 62 (1967) [172, 326 (1967)]
- SHITOVA, É. V.
The Structure of Oxide Films Obtained by Oxygen Ion Bombardment of a Silicon Surface. (E) P. V. Pavlov and É. V. Shitova. 12, 11 (1967) [172, 588 (1967)]
- SHKIRMAN, S. F.
Low-Temperature Polarization Spectra of Asymmetric Azabenzoporphyryns and Their Metal Derivatives. (E) A. N. Sevcenko, S. F. Shkirman, V. A. Mashenkov, and K. N. Solov'ev. 12, 710 (1968) [175, 545 (1967)]
- Anisotropy of Optical Transitions in Metallochlorins and Chlorophyll. (E) A. N. Sevcenko, K. N. Solov'ev, V. A. Mashenkov, S. F. Shkirman, and A. P. Loev. 12, 787 (1968) [175, 797 (1967)]
- SHOLIN, G. V.
The Anomalous Energy Dependence of the Polarization of the Radiation from Atoms Excited by a Beam of Electrons. (T) G. V. Sholin. 12, 811 (1968) [175, 1256 (1967)]
- SHOROSHEV, Yu. G.
Investigation of the Hyperacoustic Properties of Liquids by Means of a Helium-Neon Laser. (E/T) L. V. Lanishina, Yu. G. Shoroshchev, and M. I. Shakhparonov. 12, 220 (1967) [173, 70 (1967)]
- SHORSHOROV, M. Kh.
Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zuev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shorshorov. 12, 500 (1967) [174, 76 (1967)]
- SHTENBERG, G. S.
The Structure of the Alphonas Crater. (T/E) G. S. Shtenberg. 12, 658 (1968) [175, 319 (1967)]
- SHUBA, Yu. A.
On the Relative Role of Direct and Indirect Transitions in Optical Absorption. (T) V. B. Tulvinskii and Yu. A. Shuba. 12, 141 (1967) [172, 1057 (1967)]
- SHUL'PYAKOV, Yu. F.
Oriented Crystallization of α -SiC on Diamond. (E) A. V. Varshavskii and Yu. F. Shul'pyakov. 12, 202 (1967) [173, 573 (1967)]
- SHUR, Ya. S.
Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. (E) Ya. S. Shur, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko. 12, 793 (1968) [175, 804 (1967)]
- SHVARTS, A. S.
New Formulation of Quantum Theory. (T) A. S. Shvarts. 12, 309 (1967) [173, 793 (1967)]
- SHVIDKOVSKII, E. G.
Thermal Conductivity of Sodium Chloride at Helium Temperatures. (E/T) E. G. Shvidkovskii and V. M. Zakharov. 12, 335 (1967) [173, 812 (1967)]
- SHVILKIN, B. N.
Waves and Noises in the Positive-Column Plasma at Low Pressures. (E/T) A. A. Zaitsev and B. N. Shvilkin. 12, 68 (1967) [172, 565 (1967)]
- SIDOROV, A. F.
Some Two-Dimensional Self-similar Flows of a Polytopic Gas with Variable Entropy. (T) A. F. Sidorov. 12, 189 (1967) [173, 58 (1967)]
- SIDOROV, S. K.
Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys $\text{Fe}(\text{Pd}_x\text{Pt}_{1-x})$. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorov, R. Z. Abdullav, and R. V. Pospelova. 12, 974 (1968) [176, 1058 (1967)]
- SILIN, A. A.
Controlling the Adhesion Component of Friction. (E) E. A. Dukhovskii, I. V. Kragel'skii, and A. A. Silin. 12, 730 (1968) [175, 560 (1967)]
- SIMONISHVILI, T. V.
Recrystallization Diagram of Low-Carbon Iron Obtained by Vacuum Melting. (E) T. V. Simonishvili, B. V. Simonov, and R. A. Tivonenko. 12, 824 (1968) [175, 1039 (1967)]
- SIMONOV, B. V.
Recrystallization Diagram of Low-Carbon Iron Obtained by Vacuum Melting. (E) T. V. Simonishvili, B. V. Simonov, and R. A. Tivonenko. 12, 824 (1968) [175, 1039 (1967)]
- SIMONOV, M. A.
Crystal Structure of Na, Cd-Silicate $\text{Na}_2\text{CdSi}_2\text{O}_6 = \text{Na}_2\text{Cd}[\text{Si}_2\text{O}_6]$. (E) M. A. Simonov, Yu. K. Egorov-Tismenko, and N. V. Belov. 12, 662 (1968) [175, 80 (1967)]
- SIMONOV, V. I.
Crystal Structure of Vinogradovite $\text{Na}_4\text{Tl}[\text{Si}_2\text{O}_6]_2[\text{Si}_4\text{O}_{10}]_2 \cdot n\text{H}_2\text{O}$. (E) R. K. Rastavetava, V. I. Simonov, and N. V. Belov. 12, 1090 (1968) [177, 832 (1967)]
- SINAI, Ya. G.
Phenomenon of Phase Separation at Low Temperatures in Certain Lattice Models of a Gas. (T) R. A. Minlos and Ya. G. Sinai. 12, 688 (1968) [175, 323 (1967)]
- SIROTA, N. N.
Frequency Spectrum of Silicon Lattice Vibrations. (T) N. N. Sirotina and T. D. Sokolovskii. 12, 581 (1967) [174, 797 (1967)]
- Superconducting Properties of Vanadium-Niobium Alloys. (E) N. N. Sirotina and É. A. Oveschuk. 12, 516 (1967) [174, 570 (1967)]
- SIVKOV, N. I.
Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-Co System. (E) L. V. Kirenskii, S. G. Rusova, G. I. Rusov, and N. I. Sivkov. 12, 977 (1968) [176, 1282 (1967)]
- SKAKOV, Yu. A.
The Nature of Decomposition Products and the Precipitation Mechanism in Age Hardening of Commercial Iron. (E) Yu. A. Skakov. 12, 830 (1968) [175, 1263 (1967)]
- SKLIZOV, G. V.
Formation of a Long Spark in Air by Weakly Focused Laser Radiation. (E/T) M. G. Basov, V. A. Bolko, O. N. Krokhin, and G. V. Sklizov. 12, 248 (1967) [175, 538 (1967)]
- SKOKOV, I. V.
Flow of a Rarefied Gas Past a Sphere. (E/T) I. F. Zavarzina and I. V. Skokov. 12, 1 (1967) [172, 547 (1967)]
- SKOLOZDRA, R. V.
Crystal Structure of Mo_2CoSi . (E) E. I. Gladyshevskii, P. I. Kripyakevich, and R. V. Skolozdra. 12, 755 (1968) [175, 1047 (1967)]
- SLYUSAREV, V. A.
The Hydrodynamic Equations in the Theory of Superconductivity. (T) A. V. Svidzinskii and V. A. Slyusarev. 12, 59 (1967) [172, 322 (1967)]
- Local Approximation in the Electrodynamics of London Superconductors. (T) A. V. Svidzinskii and V. A. Slyusarev. 12, 71 (1967) [172, 569 (1967)]
- SMIRNOV, A. I.
Vibrations of Sandwich Beams. (T) A. I. Smirnov. 12, 94 (1967) [172, 561 (1967)]

- Vibrations of an Unbounded Laminated Plate in a Gas Flow. (T) A. I. Smirnov. 12, 179 (1967) [172, 801 (1967)]
- Unsteady Vibrations of a Free Sandwich Strip. (T) A. I. Smirnov. 12, 182 (1967) [172, 1043 (1967)]
- SMIRNOV, B. M.
Negative-Ion Gas Laser. (T) B. M. Smirnov. 12, 242 (1967) [172, 316 (1967)]
- SMIRNOV, Yu. N.
Investigation of Transition from Linear to Nonlinear Conditions in Parametric Resonance. (T) Yu. N. Smirnov. 12, 596 (1967) [174, 1057 (1967)]
- The Stability of Motion of a Charged Particle in the Simplest Geometry of a Modulated Magnetic Field. (T) Yu. N. Smirnov and D. A. Frank-Kamenetskii. 12, 609 (1967) [174, 1309 (1967)]
- SOBOLEV, E. V.
The Relation between the "Spikes" Extra Reflections in Laue Patterns of Natural Diamonds and Their Optical Properties. (E) E. V. Sobolev, V. I. Lisovoi, and S. V. Lenskaya. 12, 665 (1968) [175, 582 (1967)]
- SOBOLEV, N. N.
Spectroscopic Investigation of Gas Discharge for Argon Ion-Optical Lasers. (E) V. F. Kitaeva, Yu. I. Osipov, and N. N. Sobolev. 12, 55 (1967) [172, 317 (1967)]
- SOBOLEV, V. V.
Radiation Diffusion in the Presence of a Strongly Elongated Dispersion Index. (T) V. V. Sobolev. 12, 1083 (1968) [177, 813 (1967)]
- SOKHOR, M. I.
Transition of Silicon Carbide from the Hexagonal to the Cubic Phase under the Influence of High Pressures and High Temperatures. (E) M. I. Sokhor, V. G. Kondakov, and L. I. Fel'dgun. 12, 749 (1968) [175, 826 (1967)]
- Magnesium Borides Prepared under Superhigh-Pressure Conditions. (E) N. E. Filonenko, V. I. Ivanov, L. I. Fel'dgun, M. I. Sokhor, and L. F. Vereshchagin. 12, 833 (1968) [175, 1266 (1967)]
- SOKOLENKO, E. V.
Use of an Interferometer with a Diffraction Grating to Investigate Flow around Models in a Shock Tube. (T) L. A. Vasil'ev, I. V. Ershov, E. V. Sokolenko, and V. I. Yanichkin. 12, 802 (1968) [175, 1245 (1967)]
- SOKOLIK, G. A.
The Group of Motions of a Straight Line and the Geometrical Theory of Fields. (T) N. P. Konopleva and G. A. Sokolik. 12, 1016 (1968) [177, 302 (1967)]
- SOKOLOV, V. S.
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samaraki, L. A. Zaklyaz'minskii, P. P. Volosovich, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]
- SOKOLOVSKII, T. D.
Frequency Spectrum of Silicon Lattice Vibrations. (T) N. N. Sirota and T. D. Sokolovskii. 12, 581 (1967) [174, 797 (1967)]
- SOLODOVNIKOV, V. V.
Regularization of Statistical Dynamics Problems of Automatic Control Systems. (T) V. V. Solodovnikov and V. L. Lenskii. 12, 128 (1967) [172, 1293 (1967)]
- SOLOV'EV, K. N.
Low-Temperature Polarization Spectra of Asymmetric Azabenzoporphyrins and Their Metal Derivatives. (E) A. N. Sevechenko, S. F. Shkirman, V. A. Mashenkov, and K. N. Solov'ev. 12, 710 (1968) [175, 545 (1967)]
- Anisotropy of Optical Transitions in Metallochlorins and Chlorophyll. (E) A. N. Sevechenko, K. N. Solov'ev, V. A. Mashenkov, S. F. Shkirman, and A. P. Losev. 12, 787 (1968) [175, 797 (1967)]
- SOLOV'EVA, L. P.
A Study of Crystalline Tungstate-Chloride LnWO_4Cl ($\text{Ln} = \text{Ce}$, Pr , Nd). (E) L. Yu. Kharchenko, P. V. Klevtsov, and L. P. Solov'eva. 12, 919 (1968) [176, 826 (1967)]
- SOSKIN, M. S.
The Effect of Generation Self-cutoff in a Ruby Laser. (E) V. I. Broude, V. I. Kravchenko, P. P. Pogoretaki, E. N. Sal'kova, and M. S. Soskin. 12, 214 (1967) [173, 64 (1967)]
- STARBUKOV, M. V.
Holography Using a Direct Reference Beam. (E/T) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 371 (1967) [173, 1059 (1967)]
- Phase Holograms of Tracks in Bubble and Emulsion Chambers and the Feasibility of Interpreting Them. (E) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 590 (1967) [174, 1052 (1967)]
- STANKOVICH, Yu. L.
Fast Electrons and X-Ray Radiation during the Initial Stage of Growth of a Pulsed Spark Discharge in Air. (E) Yu. L. Stankovich and V. G. Kalinin. 12, 1042 (1968) [177, 72 (1967)]
- STANYUKOVICH, K. P.
Radiation of Elementary Particles. (T) K. P. Stanyukovich. 12, 808 (1968) [175, 1252 (1967)]
- Initial Stages of Two-Dimensional Nonstationary Gas Flow. (T) L. N. Gorshkova and K. P. Stanyukovich. 12, 927 (1968) [175, 1279 (1967)]
- Unsteady Escape of Gas in a Constant Gravity Field. (T) K. P. Stanyukovich and K. Dzhusupov. 12, 1110 (1968) [177, 804 (1967)]
- STARODUBOV, Ya. D.
Strengthening of Crystalline Substances by the Stepped Low-Temperature Creep Method. (E) I. A. Gindin, V. M. Godzhaev, N. K. Nechvolod, and Ya. D. Starodubov. 12, 498 (1967) [174, 73 (1967)]
- STARODUBTSEV, S. V.
Energy Structure of Collision Cascade of Identical Particles in a Stopping Medium. (T) V. M. Lenchenko and S. V. Starodubtsev. 12, 45 (1967) [172, 80 (1967)]
- Nuclear Resonance Fluorescence of Highly Excited States of Ni^{62} , Cd^{114} , and Pb^{208} . (E) S. V. Starodubtsev, R. B. Begzhanov, and A. A. Islamov. 12, 472 (1967) [174, 332 (1967)]
- STARTSEV, V. I.
Determination of the Dispersion of Elastic Vibrations in the Potassium Chloride Crystal Lattice Using X-Ray Diffuse Scattering. (E) V. I. Startsev and I. S. Braude. 12, 138 (1967) [172, 1053 (1967)]
- STASEL'KO, D. I.
Possibility of Obtaining Holograms Using a Reference Beam Whose Wavelength Differs from the Wavelength of the Light Scattered by an Object. (T) Yu. N. Denisyuk and D. I. Stasel'ko. 12, 954 (1968) [176, 1274 (1967)]
- STEPANOV, A. I.
One Possibility of Increasing the Q of the Resonator of a Neodymium Laser. (E) O. N. Voron'ko, N. A. Kozlov, A. A. Mak, B. G. Malinin, and A. I. Stepanov. 12, 252 (1967) [173, 542 (1967)]
- STEPANOV, N. V.
Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. (E) N. E. Alokaecevakli, O. S. Ivanov, I. I. Raevskii, and N. V. Stepanov. 12, 896 (1968) [176, 305 (1967)]
- STEPANOV, V. G.
Electron Paramagnetic Resonance of Vanadium and Chromium in CaF_2 . (E) M. M. Zaripov, V. S. Kropotov, L. D. Litvanova, and V. G. Stepanov. 12, 348 (1967) [173, 1043 (1967)]
- STOLYAROVA, A. N.
Possibility of Demonstrating the Migration of Uranium and Its Decay Products in Minerals. (E) I. G. Berzina, A. N. Stolyarova, G. N. Plerov, and Yu. S. Shimelevich. 12, 1155 (1968) [177, 1062 (1967)]
- STOYANOVA, I. G.
Effect of the Incoherent Component of Electron Scattering on the Quality of the Interference Pattern. (T/E) I. G. Stoyanova and I. F. Anaskin. 12, 357 (1967) [173, 1052 (1967)]
- Three-Beam Interference of Electrons by Means of an Electrostatic Prism. (E) I. F. Anaskin and I. G. Stoyanova. 12, 447 (1967) [174, 56 (1967)]

- STRELKOV, G. M.**
Emission and Reflectivity of Venus in the Decimeter Wavelength Range. (T) G. M. Strelkov. 12, 532 (1967) [174, 1292 (1967)]
- STRELKOV, V. I.**
Topography of the Distribution of the Nonequilibrium Concentration of Vacancies Associated with the Mutual Diffusion of Two Components in the Creep Process. (T) M. A. Kriстал and V. I. Strelkov. 12, 86 (1967) [172, 576 (1967)]
- STRIZHENOV, D. S.**
Energy Exchange in the Interaction of Atoms with the Surface of an Ideal Crystal. (T) Yu. A. Ryzhov and D. S. Strizhenov. 12, 158 (1967) [172, 1309 (1967)]
- STURMAN, V. K.**
Spontaneous Growth of Magnesium Oxide Single Crystal Whiskers. (E) P. P. Budnikov, V. A. Perepelitsin, D. B. Sanchlov, and V. K. Sturman. 12, 752 (1968) [175, 1045 (1967)]
- SUKHAREV, M. G.**
Invariant Solutions of Equations Describing the Motion of Fluids and Gases in Long Pipes. (T) M. G. Sukharev. 12, 774 (1968) [175, 781 (1967)]
- SUKHUSHINA, I. S.**
Production of Artificial "Ballias"-Type Diamonds. (E) Ya. A. Kalashnikov, L. F. Vereshchagin, E. M. Feklichev, and I. S. Sukhushina. 12, 40 (1967) [172, 76 (1967)]
- SUZDALIKINA, L. B.**
Emission Currents in Diodes Having a GaAs-Layer Structure. (E/T) É. I. Adirovich, L. A. Dubrovskii, and L. B. Suzdalkina. 12, 1129 (1968) [177, 1047 (1967)]
- SVIDZINSKII, A. V.**
The Hydrodynamic Equations in the Theory of Superconductivity. (T) A. V. Svidzinskii and V. A. Slyusarev. 12, 59 (1967) [172, 322 (1967)]
Local Approximation in the Electrodynamics of London Superconductors. (T) A. V. Svidzinskii and V. A. Slyusarev. 12, 71 (1967) [172, 569 (1967)]
- SYCHEV, V. V.**
A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheindlin, É. I. Asinovskii, V. V. Sychev, Z. B. Zenkevich, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]
- SYROVA, N. I.**
Faraday Effect and Optical Constants of Iron-Nickel Alloy Films. (E) L. V. Kirenski, N. I. Syrova, and I. S. Édel'man. 12, 819 (1968) [175, 813 (1967)]
- TAGIROV, R. I.**
Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. (E) Ya. S. Shur, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko. 12, 793 (1968) [175, 804 (1967)]
- TAO WONG-TYK**
Matrix Elements of Lorentz Transformations for a Unitary Representation. (T) Tao Wong-tyk and Nguen Van Hieu. 12, 312 (1967) [173, 1281 (1967)]
- TARAN, Yu. N.**
The Mechanism of Growth of Graphite Crystals in Fe-C-Si Melt. (E) Yu. S. Akhmatov, K. P. Bunin, and Yu. N. Taran. 12, 1069 (1968) [177, 560 (1967)]
- TARASOV, Yu. A.**
Radiation Dynamics Equations for Lasers. (T) Yu. A. Tarasov and T. N. Zubarev. 12, 598 (1967) [174, 1060 (1967)]
- TELEGINA, I. V.**
Structural Changes in Quartz in the Neighborhood of the $\alpha - \beta$ Transition. (E) E. V. Kulontsova and I. V. Telegina. 12, 350 (1967) [173, 1045 (1967)]
- TETELBAUM, D. I.**
The Structure of Amorphous Germanium, Obtained by Argon Ion Bombardment of the Crystalline Form. (E) P. V. Pavlov and D. I. Tetelbaum. 12, 746 (1968) [175, 823 (1967)]
- TIKHOMIROVA, E. N.**
Integrated Intensities in the Infrared Absorption Spectra of Methylethoxysilanes $(CH_3)_2Si(C_2H_5)_{2-n}$ ($n = 0, 1, 2, 3$). (E) V. A. Arbuzova, I. F. Kovalev, E. N. Tikhomirova, M. G. Voronkov, and L. A. Zhagat. 12, 461 (1967) [174, 320 (1967)]
- TIKHONOV, A. N.**
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magnetohydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samarskii, L. A. Zaklyaz'minskii, P. P. Volosevich, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorukil. 12, 331 (1967) [173, 808 (1967)]
- TIMAN, B. L.**
Laws Governing the Nonstationary Current in Metal-Dielectric Metal Systems. (E) A. S. Gershun and B. L. Timan. 12, 237 (1967) [173, 210 (1967)]
- TIMOFEEV, V. B.**
Holography without a Reference Beam. (T/E) V. V. Aristov, V. L. Broude, L. V. Koval'skii, V. K. Polyanski, V. B. Timofeev, and V. Sh. Shekhtman. 12, 1035 (1968) [177, 65 (1967)]
- TVONENKO, R. A.**
Recrystallization Diagram of Low-Carbon Iron Obtained by Vacuum Melting. (E) F. V. Simonishvili, B. V. Simonov, and R. A. Tivonenko. 12, 824 (1968) [175, 1039 (1967)]
- TOKAREV, L. G.**
Magnetic Field Distribution in a Coaxial Plasma Injector. (E) P. E. Kovrov, A. I. Morozov, L. G. Tokarev, and G. Ya. Shechepkin. 12, 155 (1967) [172, 1305 (1967)]
- TOLMACHEV, V. V.**
Temperature Green's Functions for Weakly Nonideal Bose-Einstein Systems. (T) V. V. Tolmachev. 12, 790 (1968) [175, 800 (1967)]
 ΔF , Δn , and Δn Corrections in the Asymptotic Expansion Method in the Modified Formulation of the Problem of a Nonideal Bose-Einstein System. (T) V. V. Tolmachev. 12, 799 (1968) [175, 1036 (1967)]
- TOLMASOV, V. A.**
Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. (E) V. V. Postnikov, M. I. Ovsyannikov, R. G. Logunova, R. A. Rubtsova, T. N. Sergievskaya, and V. A. Tolmasov. 12, 822 (1968) [175, 817 (1967)]
- TRAVINA, N. T.**
Temperature Dependence of the Critical Shear Stress of Copper-Nickel-Cobalt Alloys. (E) G. I. Nosova and N. T. Travina. 12, 281 (1967) [173, 560 (1967)]
- TRETILOV, V. I.**
Electron-Microscopic Examination of Chromium and Molybdenum Deformed under High Pressure. (E) E. D. Martynov, V. I. Trefilov, S. A. Firsov, B. I. Beresnev, and Yu. N. Ryabinin. 12, 956 (1968) [176, 1276 (1967)]
- TRET'YAKOV, V. E.**
A Problem of Motions Encounter. (T) N. N. Krasovskii and V. E. Tret'yakov. 12, 205 (1967) [173, 285 (1967)]
- TSEKHOMSKAYA, T. S.**
EPR Investigation of Gallium Glass. (T/E) D. M. Yudin, A. I. Sherstnyuk, and T. S. Tsekhomskaya. 12, 146 (1967) [172, 1063 (1967)]
- TSIKLIS, D. S.**
Measuring the Compressibility of Gases by the Displacement Method. Nitrogen Compressibility at Pressures up to 10,000 atm and Temperatures to 400°. (E) D. S. Tsiklis and E. V. Polyakov. 12, 901 (1968) [176, 308 (1967)]
- TSINTSADZE, G. A.**
Isotopic Hyperfine Structure of the EPR Spectrum of Cu^{2+} in $ZnWO_4$. (E) A. A. Galkin, A. D. Prokhorov, G. A. Tsintsadze, and V. A. Shapovalov. 12, 236 (1967) [173, 309 (1967)]
- TSURIKOVA, G. A.**
Paramagnetic Resonance of Fluoberyllate Glasses Containing Cobalt and Nickel. (E) D. M. Yudin, G. A. Tsurikova, and G. T. Petrovskii. 12, 337 (1967) [173, 815 (1967)]
- TSYPKIN, Ya. Z.**
Synthesis of Optimal-in-the-Mean Automatic Systems. (T) A. I. Propoy and Ya. Z. Tsypkin. 12, 768 (1968) [175, 1242 (1967)]
- TULVINSKII, V. B.**
On the Relative Role of Direct and Indirect Transitions in Optical Absorption. (T) V. B. Tulvinskii and Yu. A. Shuba. 12, 141 (1967) [172, 1057 (1967)]

- TURAEV, N. Yu.**
A Model for the Reflection of Ions from a Single Crystal. (T) V. M. Kivilis, É. S. Parilis, and N. Yu. Turayev. 12, 328 (1967) [173], 805 (1967)
- TURUKHANO, B. G.**
Holography by a Direct Reference Beam. (E/T) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 371 (1967) [173], 1059 (1967)
Phase Holograms of Tracks in Bubble and Emulsion Chambers and the Possibility of Interpreting Them. (E) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 590 (1967) [174], 1052 (1967)
- TYAPKIN, Yu. D.**
Electron-Microscopic Study of the Spatial Distribution of Nucleated Precipitation Phase in Aging of Cu-Be and Ni-Be Alloys. (E) A. V. Gavrilova, Yu. D. Tyapkin, and M. P. Usikov. 12, 970 (1968) [176], 1052 (1967)
The Three-Dimensional Periodic Modulated Structure in Alloys of the Ticonal Type and the Structure of Alloys of the Alni Type. (E) Yu. D. Tyapkin and I. G. Eroshenkova. 12, 391 (1967) [173], 1309 (1967)
- UGLOV, A. A.**
Allowance for Nonideal Contact in Laser Welding of Different Materials. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 636 (1967) [174], 824 (1967)
Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zurev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shoroshorov. 12, 509 (1967) [174], 76 (1967)
Effects of Peak Frequency in a Laser Pulse on the Heating of Metal Sheets. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 644 (1967) [174], 1068 (1967)
- UMANSKII, Ya. S.**
Peculiarities of the Mechanism of Fast Deformations in Hexagonal-Closed-Packed Metals. (E) O. A. Kabyshev, Ya. S. Umanskii, and G. N. Epahtein. 12, 1072 (1968) [177], 562 (1967)
- UMNOV, N. V.**
Equations of Motion for a Mechanical System Containing a Variator. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 315 (1967) [173], 1017 (1967)
Synthesis of a Mechanical System with Variator in Terms of the Given Motion of One Element. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 444 (1967) [174], 531 (1967)
- UMREIKO, D. S.**
Problem of Classifying the Electronic States of Uranyl Compounds. (E/T) L. V. Volod'ko, A. N. Sevechenko, and D. S. Umreiko. 12, 153 (1967) [172], 1303 (1967)
- USIKOV, M. P.**
Electron-Microscopic Study of the Spatial Distribution of Nucleated Precipitation Phase in Aging of Cu-Be and Ni-Be Alloys. (E) A. V. Gavrilova, Yu. D. Tyapkin, and M. P. Usikov. 12, 970 (1968) [176], 1052 (1967)
- USPENSKII, A. B.**
Method of Rectifying the Fronts for Many-Front One-Dimensional Stefan-Type Problems. (T) A. B. Uspenskii. 12, 26 (1967) [172], 61 (1967)
Possibility of Modulating the Radiation of a Semiconductor Laser by Heating the Current Carriers. (T) N. G. Basov, Yu. M. Popov, and A. V. Uspenskii. 12, 343 (1967) [173], 1036 (1967)
- UTEVSKII, L. M.**
Some Characteristics of the Dislocation Structure of Silicon Iron Single Crystals. Oriented for Slip Along the $\{111\}$ $\{211\}$ Slip System. (E) V. G. Kuryumov, L. M. Morgulits, and L. M. Utevskii. 12, 509 (1967) [174], 359 (1967)
- VAINSHTEIN, B. K.**
X-Ray Analysis of the Structure of Nematic Liquid Crystals in Electric and Magnetic Fields by Means of the Distribution Function. (E) B. K. Vainshtein, I. G. Chistyakov, E. A. Kosterin, and V. M. Chaikovskii. 12, 405 (1967) [174], 341 (1967)
- VAINSHTEIN, I. I.**
Motion of an Ideal Fluid in a Coriolis Force Field. (T) I. I. Vainshtein and M. A. Gol'dshchik. 12, 303 (1967) [173], 1277 (1967)
- VAISMAN, A. M.**
Boundary-Value Problems in the Continuum Theory of Dislocations. (T) A. M. Vaisman and I. A. Kuntin. 12, 395 (1967) [173], 1024 (1967)
- VAKHITOV, N. G.**
Electromagnetic Oscillations in a Dielectric Cylinder Located between Reflecting Planes. (T) N. G. Vakhitov. 12, 365 (1967) [173], 815 (1967)
- VAKULENKO, A. A.**
On the Disintegration of the Structure and Strength of Polymer Materials. (E) A. A. Vakulenko, Yu. N. Litov, and V. M. Chebanov. 12, 691 (1968) [176], 539 (1967)
- VARSHAVSKI, A. V.**
Oriented Crystallization of α -SiC on Dislocations. (E) A. V. Varshavskii and Yu. F. Shul'pyakov. 12, 20 (1967) [173], 873 (1967)
- VARSHAVSKI, G. A.**
Determination of the Maximum Work in an Isolated System with Limited Energy Capacities of the Heat Source and Sink. (T) G. A. Varshavskii. 12, 1115 (1968) [177], 328 (1967)
- VASIL'EV, L. A.**
Use of an Interferometer with a Diffraction Grating to Investigate Flow around Models in a Shock Tube. (T) L. A. Vasil'ev, L. V. Ershov, É. V. Sokolenko, and V. I. Yanichkin. 12, 802 (1968) [175], 1245 (1967)
- VASIL'eva, E. V.**
Temperature Dependence of the Diffusion Mobility of Metals. (E/T) D. A. Prokoshkin and E. V. Vasil'eva. 12, 1162 (1968) [177], 1069 (1967)
- VERKSTEIN, G. E.**
Theory of Relaxation under the Influence of a Random External Field. (T) G. E. Vekhtein and G. M. Zaslavskii. 12, 34 (1967) [172], 69 (1967)
- VERBITSKII, Ya. A.**
Rheological Properties of Plastic Greases and Frictional Torque in Journal Bearings at Low Speeds. (E) Yu. F. Deinega and Ya. A. Verbitskii. 12, 82 (1967) [172], 572 (1967)
- VERESHCHAGIN, L. F.**
Production of Artificial "Ballas"-Type Diamonds. (E) Ya. A. Kalashnikov, L. F. Vereshchagin, E. M. Feldichev, and I. S. Sukhushina. 12, 40 (1967) [172], 76 (1967)
- X-Ray Structural Analysis of the Crystal Structure of Iodine under High Pressure.** (E) S. S. Kabalkina, T. N. Kolobyanina, and L. F. Vereshchagin. 12, 50 (1967) [172], 313 (1967)
- Magnesium Borides Prepared under Superhigh-Pressure Conditions.** (E) N. E. Filonenko, V. I. Ivanov, L. I. Fel'dgun, M. I. Sokhor, and L. F. Vereshchagin. 12, 833 (1968) [175], 1266 (1967)
- X-Ray Diffraction Study of ZnF₂ at Pressures up to 130 kbar and at Temperatures of 25 and 300°.** (E/T) S. S. Kabalkina, L. F. Vereshchagin, and D. M. Litvagina. 12, 946 (1968) [176], 1044 (1967)
- VERTSNER, V. N.**
Mechanism of Formation of Hydrocarbon Impurities on Surfaces Irradiated by a Narrow Electron Beam. (E/T) G. S. Zhdanov and V. N. Vertsner. 12, 942 (1968) [176], 1040 (1967)
- VIGLIN, A.**
Electromagnetic Potentials and Their Gauging in Anisotropic, Dispersive, and Moving Media. (T) A. Viglin and V. Kashin. 12, 322 (1967) [173], 797 (1967)
- VIKTOROV, I. A.**
Interaction of Ultrasonic Surface and Volume Waves with Conduction Electrons in a CdS Crystal. (E) I. A. Viktorov. 12, 487 (1967) [174], 556 (1967)
- VIKTOROV, V. A.**
Design of Invariant Communication and Measuring Devices. (E) B. N. Petrov, V. A. Viktorov, and V. I. Mishenin. 12, 1023 (1968) [177], 52 (1967)
- VILENSKAYA, G. G.**
Equation of State of Trinitrotoluene. (T) G. V. Belyakov and G. G. Vilenskaya. 12, 1132 (1968) [177], 1050 (1967)
- VINTAKIN, E. Z.**
Guinier-Preston Zones in Iron-Chromium Alloys. (E/T) E. Z. Vintaikin and V. Yu. Kolontsov. 12, 962 (1968) [176], 812 (1967)

- VLADIMIROV, V. V.**
Relation of the Bohm Criterion to Ambipolar Sound Concentration in Positive-Column Gas Discharge Plasmas. (T/E) V. V. Vladimirov. 12, 490 (1967) [174, 560 (1967)]
- VOLOD'KO, L. V.**
Problem of Classifying the Electronic States of Uranyl Compounds. (E/T) L. V. Volod'ko, A. N. Sechenko, and D. S. Umreiko. 12, 153 (1967) [172, 1303 (1967)]
- VOLOKOBINSKII, Yu. M.**
Thermal Processes in Thin Films. (T) Yu. M. Volokobinskii, B. Yu. Lototskii, V. V. Pasynkov, and L. K. Chirkin. 12, 73 (1967) [172, 83 (1967)]
- VOLOSEVICH, P. P.**
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samar'skii, L. A. Zaklyaz'minskii, P. P. Volosevich, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]
- VONSOVSKII, S. V.**
Group Theoretical Classification of the States of Pairs and Complexes of Paramagnetic Impurity Ions in Crystals. (T) S. V. Vonsoskii, V. I. Cherepanov, A. N. Men', and A. E. Nikiforov. 12, 570 (1967) [174, 783 (1967)]
- VOROB'eva, I. V.**
The Kinetics of Healing of Fission-Fragment Tracks in Thin Mica Sheets. (E/T) Ya. E. Goguzin, I. G. Berzina, and I. V. Vorob'eva. 12, 814 (1968) [175, 807 (1967)]
- VORON'KO, O. N.**
One Possibility of Increasing the Q of the Resonator of a Neodymium Laser. (E) O. N. Voron'ko, N. A. Kozlov, A. A. Mak, B. G. Malinin, and A. I. Stepanov. 12, 252 (1967) [173, 542 (1967)]
- VORONKOV, M. G.**
Integrated Intensities in the Infrared Absorption Spectra of Methylsiloxanes $(CH_3)_nSi(OC_2H_5)_{4-n}$ ($n = 0, 1, 2, 3$). (E) V. A. Arbuzova, I. F. Kovalev, E. N. Tikhomirova, M. G. Voronkov, and L. A. Zhagat. 12, 461 (1967) [174, 320 (1967)]
- VORONKOVA, V. I.**
Morphology and Some Properties of Al_2O_3 Crystals Grown from Tungstate Melts. (E) V. I. Voronkova, V. K. Yanovskii, and V. A. Koptsik. 12, 994 (1968) [177, 571 (1967)]
- VORONTSOVA, L. G.**
Refining the Crystal Structure of Diparatelydisulfide. (E) L. G. Vorontsova, Z. V. Zvonkova, and G. S. Zhdanov. 12, 7 (1967) [172, 584 (1967)]
- VUKS, M. F.**
Orienting Field and Dipole Polarization. (T) M. F. Vuks. 12, 325 (1967) [173, 801 (1967)]
- YAKIMOV, S. S.**
Spin Relaxation of Iron in the Ferromagnetic Compounds MnSb and CrTe below the Curie Point. S. S. Yakimov, V. Ya. Gamlit'skii, V. I. Nikolaev, and S. R. Rodin. 12, 1153 (1968) [177, 1313 (1967)]
- YAKOVLEVA, K. A.**
Measurement of Magnetostriction in Thin Nickel Films. (T/E) K. A. Yakovleva and V. A. Buravikhina. 12, 701 (1968) [175, 66 (1967)]
- YALAMOV, Yu. I.**
Gas-Kinetic Analysis of the Thermal Slip Velocity of a Gas near a Solid Surface. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 1044 (1968) [177, 74 (1967)]
- Application of the Method of Bhatnagar, Gross, and Krook to the Determination of the Velocity of Thermal Slip of a Gas Past a Surface. (T) B. V. Deryagin, Yu. I. Yalamov, and I. N. Ivchenko. 12, 362 (1967) [173, 1287 (1967)]
- Theory of Motion of Large Volatile Particles in Diffusing Gas Mixtures. (T) B. V. Deryagin and Yu. I. Yalamov. 12, 587 (1967) [174, 1048 (1967)]
- A Theory of the Motion of Solution Drops in a Diffusing Binary Gas Mixture. (T) B. V. Deryagin and Yu. I. Yalamov. 12, 694 (1968) [175, 59 (1967)]
- Velocity Distribution Function of the Gas Molecules near a Solid Wall in a Nonuniformly Heated Gas. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 714 (1968) [175, 549 (1967)]
- YANICHKIN, V. I.**
Use of an Interferometer with a Diffraction Grating to Investigate Flow around Models in a Shock Tube. (T) L. A. Vasil'ev, I. V. Ershov, E. V. Sokolenko, and V. I. Yanichkin. 12, 802 (1968) [175, 1245 (1967)]
- YANOVSKII, V. K.**
Morphology and Some Properties of Al_2O_3 Crystals Grown from Tungstate Melts. (E) V. I. Voronkova, V. K. Yanovskii, and V. A. Koptsik. 12, 994 (1968) [177, 571 (1967)]
- YANUSHKEVICH, V. A.**
Mechanism of High-Temperature Creep of Metals with High Stacking-Fault Energy. (T) V. A. Yanushkevich and L. I. Ivanov. 12, 905 (1968) [176, 312 (1967)]
- YAVOR, S. Ya.**
Effect of the Shape of Electrodes and Poles of Quadrupole Lenses on the Quality of the Image Produced. (T) L. P. Ovsyannikova and S. Ya. Yavor. 12, 261 (1967) [173, 76 (1967)]
- YUABOV, Yu. M.**
Anomalous Photoelectric Effect in Monochromatic Light. (E) E. I. Adirovich, V. M. Rubinov, and Yu. M. Yuabov. 12, 477 (1967) [174, 545 (1967)]
- YUDIN, A. A.**
Theory of Dislocations in the Two-Row Model of a Crystal. (T) A. A. Yudin and L. L. Mirkin. 12, 65 (1967) [172, 330 (1967)]
- YUDIN, D. M.**
EPR Investigation of Gallium Glass. (T/E) D. M. Yudin, A. L. Sherstyuk, and T. S. Tsakhomakaya. 12, 146 (1967) [172, 1063 (1967)]
- Paramagnetic Resonance of Fluoborillate Glasses Containing Cobalt and Nickel. (E) D. M. Yudin, G. A. Tsurikova, and T. G. Petrovskii. 12, 337 (1967) [173, 815 (1967)]
- YUKOVA, A. I.**
Effect of a Third Component of the Behavior of Impurities in the Zone Melting of Aluminum. (E) A. I. Belyaev and A. I. Yukova. 12, 827 (1968) [175, 1259 (1967)]
- YUTSIS, A. P.**
Permutation Groups of the Representations of the Groups G_2 and SU_3 . (T) S. I. Aliehsauskas, Z. B. Rudzikas, and A. P. Yutis. 12, 23 (1967) [172, 58 (1967)]
- The Clebsch-Gordan Coefficients of Symmetric Representations of the Groups SU_n . (T) S. I. Aliehsauskas and A. P. Yutis. 12, 1012 (1968) [177, 61 (1967)]
- ZAITSSEV, B. N.**
Waves and Noises in the Positive-Column Plasma at Low Pressures. (E/T) A. A. Zaitsev and B. N. Shvilkina. 12, 68 (1967) [172, 565 (1967)]
- ZAKHAROV, V. M.**
Thermal Conductivity of Sodium Chloride at Helium Temperatures. (E/T) E. G. Shvidkovskii and V. M. Zakharov. 12, 335 (1967) [173, 812 (1967)]
- ZAKLYAZ'MINSKII, L. A.**
Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samar'skii, L. A. Zaklyaz'minskii, P. P. Volosevich, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]
- ZARIPOV, M. M.**
Electron Paramagnetic Resonance of Vanadium and Chromium in CaF_2 . (E) M. M. Zaripov, V. S. Kropotov, L. D. Livanova, and V. G. Stepanov. 12, 348 (1967) [173, 1043 (1967)]
- ZASLAVSKII, G. M.**
Theory of Relaxation under the Influence of a Random External Field. (T) G. E. Vekshstein and G. M. Zaslavskii. 12, 34 (1967) [172, 69 (1967)]
- ZAVARZINA, I. F.**
Flow of a Rarefied Gas Past a Sphere. (E/T) I. F. Zavarzina and I. V. Skokov. 12, 1 (1967) [172, 547 (1967)]

- ZEIGER, S. G.**
Possibility of Unidirectional Oscillation in a Gaseous Traveling Wave Laser. (T) S. G. Zeiger. 12, 1054 (1968) [177, 554 (1967)]
- ZEMLYAKOV, S. D.**
Synthesis of Algorithms for Changing Adjustable Coefficients in Self-adaptive Control Systems with a Model. (T) S. D. Zemlyakov and V. Yu. Rutkovskii. 12, 418 (1967) [174, 47 (1967)]
- ZEMTSOV, Yu. K.**
Calculation of Radial Integrals for Multipole Transitions in Atomic Spectra. (T) Yu. K. Zemtsov. 12, 470 (1967) [174, 330 (1967)]
- ZENKEVICH, V. B.**
A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheindlin, É. I. Asinovsky, V. V. Sychev, V. B. Zenkevich, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]
- ZHAGAT, L. A.**
Integrated Intensities in the Infrared Absorption Spectra of Methylethoxysilanes $(CH_3)_nSi(OC_2H_5)_{4-n}$ ($n = 0, 1, 2, 3$). (E) V. A. Arbusova, I. F. Kovalev, E. N. Tikhomirova, M. G. Voronkov, and L. A. Zhagat. 12, 461 (1967) [174, 320 (1967)]
- ZHELNOROVICH, V. A.**
The Theory of Constructing Models of Continuous Media. (T) V. A. Zhelnorovich. 12, 863 (1968) [176, 283 (1967)]
- ZHDANOV, G. S.**
Refining the Crystal Structure of Diparatolylsulfide. (E) L. G. Vorontsova, Z. V. Zvonkova, and G. S. Zhdanov. 12, 7 (1967) [172, 584 (1967)]
- Mechanism of Formation of Hydrocarbon Impurities on Surfaces Irradiated by a Narrow Electron Beam.** (E/T) G. S. Zhdanov and V. N. Vertsner. 12, 942 (1968) [176, 1040 (1967)]
- ZILOVA, T. K.**
Kinetics of Fracture under Biaxial Stress. (E) Ya. B. Fridman, T. K. Zilova, and N. I. Novosil'tseva. 12, 518 (1967) [174, 572 (1967)]
- ZINOV'EV, V. A.**
Equations of Motion for a Mechanical System Containing a Variator. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 315 (1967) [173, 1017 (1967)]
- Synthesis of a Mechanical System with Variator in Terms of the Given Motion of One Element.** (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 444 (1967) [174, 531 (1967)]
- ZOLOTOV, A. V.**
The Possibility of "Thermal" Explosion and the Structure of the Tungus Meteorite. (T/E) A. V. Zolotov. 12, 101 (1967) [172, 805 (1967)]
- Estimation of the Parameters of the Tungus Meteorite Based on New Data.** (T/E) A. V. Zolotov. 12, 108 (1967) [172, 1049 (1967)]
- ZUBAREV, T. N.**
Radiation Dynamics Equations for Lasers. (T) Yu. A. Tarasov and T. N. Zubarev. 12, 598 (1967) [174, 1060 (1967)]
- ZUBKOVA, V. S.**
Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Galaktionova, V. F. Egorova, V. S. Zubkova, A. A. Mak, and D. S. Prilezhaev. 12, 360 (1967) [173, 1284 (1967)]
- ZUEV, I. V.**
Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zuev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shorshorov. 12, 500 (1967) [174, 76 (1967)]
- ZUEV, V. E.**
Experimental Study of the Limits of Applicability of Buger's Law for the Description of the Attenuation of Narrow Collimated Light Beams in Dispersive Media. (E) V. E. Zuev, M. V. Kabanov, and V. A. Savel'ev. 12, 704 (1968) [175, 327 (1967)]
- ZVONKOVA, Z. V.**
Refining the Crystal Structure of Diparatolylsulfide. (E) L. G. Vorontsova, Z. V. Zvonkova, and G. S. Zhdanov. 12, 7 (1967) [172, 584 (1967)]
- ZVYAGIN, B. B.**
Dislocationless Growth of Natural Crystals as a Result of Long-Range Action of Active Local Centers. (T) G. I. Distler and B. B. Zvyagin. 12, 535 (1967) [174, 1082 (1967)]
- ZYRYANOV, P. S.**
Absorption of Ultrasound by Free Electrons of a Metal in a Quantizing Magnetic Field. (T) P. S. Zyryanov and B. N. Filippov. 12, 698 (1967) [175, 63 (1967)]

Acoustics
Aerodynamics
Astrophysics
Atomic Structure and Spectra
Chemical Physics
Crystal Growth
Crystalline State
Cybernetics and Control Theory
Dielectrics
Elasticity and Plasticity
Electrical Discharges
Electrical Properties, Effects, and Engineering
Electromagnetism
Electron and Ion Optics
Electrons and Positrons
Elementary Particle Interactions
Explosions
Ferromagnets and Ferroelectrics
Field Theory
Films, Thin
Fluid Dynamics
Friction and Wear
Gases
Glass
Ions and Ionization
Irradiation Effects

Liquids
Magnetic Properties and Effects
Magnetohydrodynamics
Masers and Lasers
Mathematical Physics
Mechanics
Metallurgy
Metal Physics
Methods and Instrumentation
Molecular Structure and Spectra
Optical Properties and Techniques
Photoelectric Phenomena
Plasmas
Polymers
Quantum Mechanics
Radiation
Relativity and Gravitation
Resonance
Scattering
Semiconductors
Statistical Mechanics and Thermodynamics
Strength of Materials
Superconductivity
Surface Properties
Thermal Properties and Heat Transfer
Wave Propagation
X Rays

ACOUSTICS

Investigation of the Hyperacoustic Properties of Liquids by Means of a Helium-Neon Laser. (E/T) L. V. Lashina, Yu. G. Shoroshov, and M. I. Shakhparonov. 12, 220 (1967) [173, 70 (1967)]
The Theory of Electroacoustic Phenomena in Solids. (T) É. M. Épshtein. 12, 245 (1967) [173, 320 (1967)]
Feasibility of Investigating the Acoustical Properties of Liquids in the Frequency Range 10^8 to 10^{10} cps from Data on the Scattered-Light Diagram. (T/E) M. I. Shakhparonov. 12, 459 (1967) [174, 69 (1967)]
Acoustoelectric Effect in CdSe under Constant Amplification of Ultrasound by Electron Flow. (T/E) V. I. Pustovolt, V. I. Baibakov, and G. S. Pado. 12, 576 (1967) [174, 791 (1967)]
Determination of Stresses in Solids by the Polarized-Ultrasonic Frequency Method. (E) Yu. A. Nilender, G. A. Budenkov, and G. Ya. Pochtovik. 12, 641 (1967) [174, 1065 (1967)]
Absorption of Ultrasound by Free Electrons of a Metal in a Quantizing Magnetic Field. (T) P. S. Zyryanov and B. N. Filipov. 12, 698 (1968) [175, 63 (1967)]
Motion of a Rigid Sphere under the Influence of an Acoustic Pressure Wave. (T) É. I. Grigolyuk and A. G. Gorshkov. 12, 1009 (1968) [177, 539 (1967)]

AERODYNAMICS

Flow of a Rarefied Gas Past a Sphere. (E/T) I. F. Zavarzina and I. V. Skokov. 12, 1 (1967) [172, 547 (1967)]
The Direct Problem of Plane Symmetrical Flow with Detached Shock Wave about a Smooth Convex Profile. (T) É. G. Shifrin. 12, 4 (1967) [172, 550 (1967)]
Some Two-Dimensional Self-Similar Flows of a Polytopic Gas with Variable Entropy. (T) A. F. Sidorov. 12, 189 (1967) [172, 58 (1967)]

Solutions of the System of Equations of Boundary Layer Theory by the Method of Straight Lines. (T) O. A. Oleinik. 12, 525 (1967) [174, 1288 (1967)]
Damping of Perturbations Produced by a Solid of Revolution in a Viscous Heat-Conducting Supersonic Gas Flow. (T) V. N. Diesperov and O. S. Ryzhov. 12, 651 (1968) [175, 51 (1967)]
Exact Solutions of Equations Describing the Motion of a Gravitating Gas with Homogeneous Deformations and Transverse Velocity Components. (T) E. V. Ryazanov. 12, 743 (1968) [175, 774 (1967)]
Flow of a Viscous Gas near a Wall with a Corner. (T) L. Yu. Brailovskaya. 12, 845 (1968) [176, 549 (1967)]

ASTROPHYSICS

The Possibility of "Thermal" Explosion and the Structure of the Tungus Meteorite. (T/E) A. V. Zolotov. 12, 101 (1967) [172, 805 (1967)]
Electron Temperature in Stellar Envelopes Containing High-Energy Electrons. (E) G. A. Gurzadyan. 12, 105 (1967) [172, 1046 (1967)]
Estimation of the Parameters of the Tungus Meteorite Based on New Data. (T/E) A. V. Zolotov. 12, 108 (1967) [172, 1049 (1967)]
Possible Polarization of Bremsstrahlung from Solar Flares. (T) A. Korzhak. 12, 192 (1967) [173, 291 (1967)]
Optimal Transfer Flights between Close Nearly Circular Non-planar Orbits. (T) G. E. Kuzmak and N. I. Lavrenko. 12, 318 (1967) [173, 1273 (1967)]
Relationship between the Radio Emission of Local Sources on the Sun and the Structure of Optically Observed Active Regions. (E) A. R. Abbasov. 12, 403 (1967) [174, 538 (1967)]
Regions where Motion is Impossible in the Three-Body Problem. (T) V. G. Golubev. 12, 529 (1967) [174, 767 (1967)]

Emission and Reflectivity of Venus in the Decimeter Wavelength Range. (T) G. M. Strekolov. 12, 532 (1967) [174, 1292 (1967)]
 The Structure of Meteors. (T) P. B. Babadzhanyan and E. N. Kramer. 12, 654 (1968) [175, 315 (1967)]
 The Structure of the Alphonso Crater. (T/E) G. S. Steinhilber. 12, 658 (1968) [175, 319 (1967)]

Radiation Diffusion in the Presence of a Strongly Elongated Dispersion Indicatix. (T) V. V. Sobolev. 12, 1083 (1968) [177, 812 (1967)]

The Nature of Fragmentation in Meteoric Bodies. (E/T) P. B. Babadzhanyan and E. N. Kramer. 12, 1086 (1968) [177, 1043 (1967)]

ATOMIC STRUCTURE AND SPECTRA

Spectroscopic Investigation of Gas Discharge for Argon Ion-Optical Lasers. (E) V. F. Kitaeva, Yu. I. Ostrov, and N. N. Sobolev. 12, 55 (1967) [172, 317 (1967)]

Proton Magnetic Resonance and Position of Hydrogen Atoms in Natural Edingtonite. (E/T) I. A. Belitskii, S. P. Gabuda, and A. G. Lundin. 12, 119 (1967) [172, 1318 (1967)]

The Nonexponential Decay Law and Interference Experiments. (T) L. A. Khalifa. 12, 143 (1967) [172, 1059 (1967)]

EPR Investigation of Gallium Glass. (T/E) D. M. Yudin, A. I. Sherstnyuk, and T. S. Tsekhomskaya. 12, 146 (1967) [172, 1063 (1967)]

Problem of Classifying the Electronic States of Uranyl Compounds. (E/T) L. V. Volod'ko, A. N. Sechenko, and D. S. Umreiko. 12, 153 (1967) [172, 1303 (1967)]

Energy Spectrum of Electrons Emitted from a KCl Single Crystal Bombarded with Helium Ions. (E) A. I. Kondrashev and N. N. Petrov. 12, 217 (1967) [173, 67 (1967)]

Raman Scattering of Ultrahigh-Frequency Radiation by Ion-Acoustic Vibrations of a Confined Plasma. (T) D. D. Ryutov. 12, 223 (1967) [173, 73 (1967)]

Isotopic Hyperfine Structure of the EPR Spectrum of Cu^{2+} in ZnWO_4 . (E) A. A. Galkin, A. D. Prokhorov, G. A. Teintsadze, and V. A. Shapovalov. 12, 236 (1967) [173, 309 (1967)]

Paramagnetic Resonance of Fluoberyllate Glasses Containing Cobalt and Nickel. (E) D. M. Yudin, G. A. Tsurikova, and G. T. Petrovskii. 12, 337 (1967) [173, 815 (1967)]

Calculation of the Energy of Molecular Excitons. (T) A. S. Davydov and É. N. Myasnikov. 12, 346 (1967) [173, 1040 (1967)]

Electron Paramagnetic Resonance of Vanadium and Chromium in CaF_2 . (E) M. M. Zaripov, V. S. Kropotov, L. D. Livanova, and V. G. Stepanov. 12, 348 (1967) [173, 1043 (1967)]

Two-Photon Absorption Spectrum in CdS near the Fundamental Absorption Edge. (E/T) V. K. Konukhov, L. A. Kulevskii, and A. M. Prokhorov. 12, 354 (1967) [172, 1048 (1967)]

Integrated Intensities in the Infrared Absorption Spectra of Methylketoxylanes $(\text{CH}_3)_2\text{Si}(\text{OCX})_2\text{H}_2$ ($\text{X} = \text{O}, 1, 2, 3$). (E) V. A. Arbutova, I. F. Kovalev, É. N. Tikhomirova, M. G. Voronkov, and L. A. Zhagat. 12, 461 (1967) [174, 320 (1967)]

Calculation of Radial Integrals for Multipole Transitions in Atomic Spectra. (T) Yu. K. Zemtsov. 12, 470 (1967) [174, 330 (1967)]

Nuclear Resonance Fluorescence of Highly Excited States of Ni^{42} , Cd^{114} , and Pb^{208} . (E) S. V. Starodubtsev, R. B. Begh'nov, and A. A. Isalimov. 12, 472 (1967) [174, 332 (1967)]

Frequency Spectrum of Silicon Lattice Vibrations. (T) N. N. Sirota and T. D. Sokolovskii. 12, 581 (1967) [174, 797 (1967)]

Hyperfine Structure of the EPR Line with a g Factor ~ 4.3 Due to Mn^{2+} in the Chalcogenide Glasses $\text{TiSeAs}_2\text{Se}_3$, $\text{Ti}_2\text{SAs}_2\text{S}_3$, and $\text{Ti}_2\text{TeAs}_2\text{Te}_3$. (E) V. N. Lazukin and I. V. Chepeleva. 12, 606 (1967) [174, 1306 (1967)]

Fine Structure of the X-Ray Emission Bands of Elements of the Iron Transition Group. (E) V. V. Nemoshkalenko and V. Ya. Nagornyi. 12, 735 (1968) [175, 566 (1967)]

Hyperfine Structure of the Electron Paramagnetic Resonance Spectra of the Vanadyl Ion in Vanadium-Containing Glasses. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskii. 12, 780 (1968) [175, 789 (1967)]

The Anomalous Energy Dependence of the Polarization of the Radiation from Atoms Excited by a Beam of Electrons. (T) G. V. Sholin. 12, 811 (1968) [175, 1256 (1967)]
 Spectrum-Time Studies of $\text{CaF}_2:\text{Sm}^{2+}$ Crystal Generation for Excitation by a Ruby Laser. (E) V. M. Marchenko and A. M. Prokhorov. 12, 1057 (1968) [177, 557 (1967)]

CHEMICAL PHYSICS

Spectral Dependence of the Photoionization of Sensitivity Centers in Cadmium Sulfide. (T/E) V. E. Lashkarev and A. A. Plashchenko. 12, 42 (1967) [172, 77 (1967)]

The Crystal Structure of Trivalent Cobalt Amines with Intramolecular Thiocyanate Group. (E/T) I. D. Samus' and N. V. Belov. 12, 195 (1967) [173, 83 (1967)]

Crystal Structure of Potassium Bichromate $\text{K}_2\text{Cr}_2\text{O}_7$ (Lopezite). (E) É. A. Kuz'min, V. V. Ryukhin, and N. V. Belov. 12, 293 (1967) [173, 1068 (1967)]

Thermal Conductivity of Sodium Chloride at Helium Temperatures. (E/T) E. G. Shvidkovskii and V. M. Zakharov. 12, 335 (1967) [173, 812 (1967)]

Paramagnetic Resonance of Fluoberyllate Glasses Containing Cobalt and Nickel. (E) D. M. Yudin, G. A. Tsurikova, and G. T. Petrovskii. 12, 337 (1967) [173, 815 (1967)]

The Three-Dimensional Periodic Modulated Structure in Alloys of the Ticonal Type and the Structure of Alloys of the AlNi Type. (E) Yu. D. Tyapkin and I. G. Eroshenkova. 12, 391 (1967) [173, 1309 (1967)]

Crystal Growth in Polymorphic Transitions in Glutaric Acid and Hexachloroethane. (E) Yu. V. Mnyukh, N. I. Mushev, and A. I. Kitagorodskii. 12, 409 (1967) [174, 345 (1967)]

New Data on the Embrilliment of Metals by Liquid Metals. (E) A. P. Savitskii and L. K. Savitskaya. 12, 647 (1967) [174, 1072 (1967)]

The Structure of the Amide Group in p -Bromobenzoyl ethylamine. (E) R. P. Shibaeva, L. O. Atomyan, and R. G. Kostyanovskii. 12, 669 (1968) [175, 586 (1967)]

Low-Temperature Polarization Spectra of Asymmetric Azobenzophyrins and Their Metal Derivatives. (E) A. N. Sechenko, S. F. Shkirim, V. A. Mashekov, and K. N. Solov'ev. 12, 710 (1968) [175, 545 (1967)]

Influence of Plastic Deformation on the Mössbauer Effect in Fe-Ni Invar Alloys. (E/T) I. Ya. Dekhtyar, B. G. Egiazarov, L. M. Isakov, V. S. Mikhalevich, and V. P. Romashko. 12, 727 (1968) [175, 556 (1967)]

Transition of Silicon Carbide from the Hexagonal to the Cubic Phase under the Influence of High Pressures and High Temperatures. (E) M. I. Sokhor, V. G. Kondakov, and L. I. Fel'dgun. 12, 749 (1968) [175, 826 (1967)]

Recrystallization Diagram of Low-Carbon Iron Obtained by Vacuum Melting. (E) T. V. Simoniashvili, B. V. Simonov, and R. A. Tivonzenko. 12, 824 (1968) [175, 1039 (1967)]

Effect of a Third Component on the Behavior of Impurities in the Zone Melting of Aluminum. (E) A. I. Belyaev and A. I. Yukova. 12, 827 (1968) [175, 1259 (1967)]

Electron-Microscopic Study of the Spatial Distribution of Nucleated Precipitation Phase in Aging of Cu-Be and Ni-Be Alloys. (E) A. V. Gavrilova, Yu. D. Tyapkin, and M. P. Usikov. 12, 970 (1968) [176, 1052 (1967)]

Crystal Structure of Synthetic Na₂Zn₂Si₂O₇. (E) S. T. Amirov, A. V. Nikitin, V. V. Ryukhin, and N. V. Belov. 12, 987 (1968) [177, 92 (1967)]

Nucleation of Martensite in Iron-Nickel Alloys Showing Disruptive Transformation Kinetics. (E/T) O. P. Maksimova and V. V. Nemirovskii. 12, 1062 (1968) [177, 81 (1967)]

Equation of State of Trinitrotoluene. (E) G. V. Belyakov and G. G. Vilenakaya. 12, 1132 (1968) [177, 1050 (1967)]

Phase Diagrams and Structure of Some Semiconductor $\text{Al}^{IV}\text{B}^{IV}\text{C}^{IV}$ Alloys. (E) L. S. Palatnik and E. I. Rogacheva. 12, 503 (1967) [174, 80 (1967)]

Reaction Zone Temperature during the Scavenging of Iron Melts by Gas-Oxygen Mixtures and by Air. (E) N. P. Levenets. 12, 512 (1967) [174, 566 (1967)]

CRYSTAL GROWTH

- Production of Artificial "Ballas"-Type Diamonds. (E) Ya. A. Kalashnikov, L. F. Vereshchagin, E. M. Felichev, and I. S. Sukhushina. 12, 40 (1967) [172, 76 (1967)]
- Electrolysis of Synthetic Quartz Containing a Nonstructural Impurity. (E) V. G. Lushnikov and V. E. Khadzhi. 12, 116 (1967) [172, 1072 (1967)]
- Electron-Microscope Study of Synthetic Quartz with a Nonstructural Impurity. (E) I. P. Khadzhi and V. E. Khadzhi. 12, 122 (1967) [172, 1321 (1967)]
- Growth of a Hexagonal Selenium Crystal from a Monoclinic Selenium Single Crystal by a Polymorphic Transformation. (E) Yu. G. Asadov. 12, 199 (1967) [173, 570 (1967)]
- Oriented Crystallization of α -SiC on Diamond. (E) A. V. Varshavskii and Yu. F. Shul'pyakov. 12, 202 (1967) [173, 573 (1967)]
- Crystal Growth in Polymorphic Transitions in Glutaric Acid and Hexachloroethane. (E) Yu. V. Myukh, N. I. Musayev, and A. I. Kitaigorodskii. 12, 409 (1967) [174, 945 (1967)]
- Dislocationless Growth of Natural Crystals as a Result of Long-Range Action of Active Local Centers. (T) G. I. Distler and B. B. Zryagin. 12, 535 (1967) [174, 1082 (1967)]
- Spontaneous Growth of Magnesium Oxide Single Crystal Whiskers. (E) P. P. Budnikov, V. A. Peropeltin, D. B. Sandulov, and V. K. Sturman. 12, 752 (1968) [175, 1045 (1967)]
- Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. (E) V. V. Postnikov, M. I. Ovsyannikov, R. G. Loginova, R. A. Rubtsova, T. N. Sergievskaya, and V. A. Tolmashov. 12, 822 (1968) [175, 817 (1967)]
- Magnesium Borides Prepared under Superhigh-Pressure Conditions. (E) N. E. Filonenko, V. I. Ivanov, L. I. Fel'dgun, M. I. Sokhor, and L. F. Vereshchagin. 12, 833 (1968) [175, 1266 (1967)]
- Hydrothermal Synthesis and Symmetry of Crystals of the Oxotungstates $La_2W_2O_{10}$ ($La = Ce, Pr, and Nd$). (E) P. V. Klevtsov, L. Yu. Kharchenko, and R. F. Klevtsova. 12, 851 (1968) [175, 575 (1967)]
- Influence of Vibration on the Crystallization of Cadmium. (E) D. L. Leitch, N. V. Mikhailov, and P. A. Reinder. 12, 908 (1968) [175, 564 (1967)]
- Morphology and Some Properties of Al_2O_3 Crystals Grown from Tungstate Melts. (E) V. I. Voronkova, V. K. Yanovskii, and V. A. Koptsik. 12, 994 (1968) [177, 571 (1967)]
- The Mechanism of Growth of Graphite Crystals in Fe-C-Si Melt. (E) Yu. S. Akhmatov, K. I. Bunin, and Yu. N. Taran. 12, 1069 (1968) [177, 560 (1967)]
- Dendrite Growth Mechanism of Crystals with the Diamond Structure. (E/T) D. A. Petrov. 12, 1093 (1968) [177, 1075 (1967)]

CRYSTALLINE STATE

- Refining the Crystal Structure of Diparatyldisulfide. (E) L. G. Vorontsova, Z. V. Zvonkova, and G. S. Zhdanov. 12, 7 (1967) [172, 584 (1967)]
- The Structure of Oxide Films Obtained by Oxygen Ion Bombardment of a Silicon Surface. (E) P. V. Pavlov and E. V. Shitova. 12, 11 (1967) [172, 588 (1967)]
- Anisotropy of the Angular Distribution and Structure of the Energy Distribution of Ions Scattered from the Surface of a Single Crystal. (E/T) A. A. Aliev and A. A. Arifov. 12, 30 (1967) [172, 65 (1967)]
- X-Ray Structural Analysis of the Crystal Structure of Iodine under High Pressure. (E) S. S. Kabalkina, T. N. Kolobyanina, and L. F. Vereshchagin. 12, 50 (1967) [172, 313 (1967)]
- Theory of Dislocations in the Two-Row Model of a Crystal. (T) A. A. Yudin and I. L. Mirkin. 12, 65 (1967) [172, 330 (1967)]
- Effect of Initial Crystallographic Orientation on the Recrystallization Temperature of Wire Obtained from Molybdenum Single Crystals. (E) M. Savitskii, G. S. Burkhanov, N. N. Bokareva, A. S. Grokhochinskii, and E. V. Ottenberg. 12, 76 (1967) [172, 87 (1967)]

- Topography of the Distribution of the Nonequilibrium Concentration of Vacancies Associated with the Mutual Diffusion of Two Components in the Creep Process. (T) M. A. Krishnal and V. I. Strelok. 12, 86 (1967) [172, 576 (1967)]
- Long-Range Action of Active Centers on Crystal Surfaces. (E) G. I. Distler and S. A. Kobzareva. 12, 112 (1967) [172, 1069 (1967)]
- Electrolysis of Synthetic Quartz Containing a Nonstructural Impurity. (E) V. G. Lushnikov and V. E. Khadzhi. 12, 116 (1967) [172, 1072 (1967)]
- Proton Magnetic Resonance and Position of Hydrogen Atoms in Natural Edingtonite. (E/T) I. A. Belitskii, S. P. Gabuda, and A. G. Lundin. 12, 119 (1967) [172, 1318 (1967)]
- Electron-Microscope Study of Synthetic Quartz with a Nonstructural Impurity. (E) I. P. Khadzhi and V. E. Khadzhi. 12, 122 (1967) [172, 1321 (1967)]
- Multiple Collisions in the Scattering of Ions by Crystals. (E) E. S. Mashkova and V. A. Molchanov. 12, 153 (1967) [172, 813 (1967)]
- Determination of the Dispersion of Elastic Vibrations in the Potassium Chloride Crystal Lattice Using X-Ray Diffuse Scattering. (E) V. I. Startsev and I. S. Braude. 12, 138 (1967) [172, 1053 (1967)]
- Energy Exchange in the Interaction of Atoms with the Surface of an Ideal Crystal. (T) Yu. A. Ryzhov and D. S. Strizhenov. 12, 158 (1967) [172, 1309 (1967)]
- Effect of X Radiation on Mutual Diffusion in Single Crystals of Alkali Halides. (E) Ya. E. Geguzin and Yu. I. Boiko. 12, 161 (1967) [172, 820 (1967)]
- Dislocation Structure of Ordered Copper-Nickel-Zinc Alloys. (E) V. G. Kurdyumov and L. P. Chapuytova. 12, 164 (1967) [172, 823 (1967)]
- Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atovmyan, T. V. Bavina, V. G. Bordo'ko, O. N. Breusov, A. N. Dremin, A. Kh. Muranovich, and S. V. Pershin. 12, 173 (1967) [172, 1068 (1967)]
- The Crystal Structure of Trivalent Cobalt Amines with Intra-spheric Thiocyanate Group. (E/T) L. D. Samus' and N. V. Belov. 12, 195 (1967) [173, 83 (1967)]
- Growth of a Hexagonal Selenium Crystal from a Monoclinic Selenium Single Crystal by a Polymorphic Transformation. (E) Yu. G. Asadov. 12, 199 (1967) [173, 570 (1967)]
- Oriented Crystallization of α -SiC on Diamond. (E) A. V. Varshavskii and Yu. F. Shul'pyakov. 12, 202 (1967) [173, 573 (1967)]
- The Experimental Separation of the Frenkel and Kirkendall Effects. (E) Ya. E. Geguzin, Yu. I. Boiko, and L. N. Paritakaya. 12, 367 (1967) [173, 323 (1967)]
- Effects of Atomic Ordering in Ternary Solid Solutions Based on Ni-Fe Alloyed with Group VI Elements, Cr, Mo, and W. (E) I. L. Eganayan and Ya. P. Selisskii. 12, 269 (1967) [173, 325 (1967)]
- Crystal Structure of Potassium Bichromate $K_2Cr_2O_7$ (Lopezite). (E) E. A. Kuz'min, V. V. Ryukhin, and N. V. Belov. 12, 293 (1967) [173, 1068 (1967)]
- A Model for the Reflection of Ions from a Single Crystal. (T) V. M. Kivlits, E. S. Parillis, and N. Yu. Turasev. 12, 328 (1967) [173, 805 (1967)]
- Structural Changes in Quartz in the Neighborhood of the $\alpha - \beta$ Transition. (E) E. V. Kolontsova and I. V. Telegina. 12, 350 (1967) [173, 1045 (1967)]
- Dislocation Structure of Stressed Iron Microcrystals. (E) I. P. Kushnir. 12, 387 (1967) [173, 1306 (1967)]
- Boundary-Value Problems in the Continuum Theory of Dislocations. (T) A. M. Vaisman and I. A. Kunin. 12, 395 (1967) [173, 1024 (1967)]
- X-Ray Analysis of the Structure of Nematic Liquid Crystals in Electric and Magnetic Fields by Means of the Distribution Function. (E) B. K. Vainshtein, I. G. Chistyakov, E. A. Kosterin, and V. M. Chakovskii. 12, 405 (1967) [174, 341 (1967)]

- Crystal Growth in Polymorphic Transitions in Glutaric Acid and Hexachloroethane. (E) Yu. V. Mayukh, N. I. Musaev, and A. I. Kitagorodskii. 12, 409 (1967) [174, 345 (1967)]
- Strengthening of Crystalline Substances by the Stopped Low-Temperature Creep Method. (E) I. A. Gindin, V. M. Godshaev, N. K. Nechvolod, and Ya. D. Starodubov. 12, 498 (1967) [174, 73 (1967)]
- Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zuev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shorshorov. 12, 500 (1967) [174, 76 (1967)]
- Some Characteristics of the Dislocation Structure of Silicon Iron Single Crystals, Oriented for Slip along the [111] (211) Slip System. (E) V. G. Kurdyumov, L. M. Morgulis, and L. M. Utevalii. 12, 509 (1967) [174, 339 (1967)]
- Nature of Optical Inhomogeneities in Quartz Crystals. (E) G. V. Kleshech, I. V. Kabanovich, and L. N. Chernyi. 12, 413 (1967) [174, 585 (1967)]
- Temperature Dependence of the First Magnetic-Anisotropy Constant of Ferrite Single Crystals with Spinel Structure as a Function of the Saturation Magnetization. (E) A. I. Drokina. 12, 454 (1967) [174, 64 (1967)]
- Identification of Etch Figures on Tracks of Fission Fragments in Ionic Crystals. (E) L. G. Berzina and I. B. Berman. 12, 484 (1967) [174, 553 (1967)]
- Deformation and Fracture of Cementite. (E) A. A. Baranov and O. I. Fomichev. 12, 495 (1967) [174, 71 (1967)]
- Dislocationless Growth of Natural Crystals as a Result of Long-Range Action of Active Local Centers. (T) G. I. Diatler and B. B. Zvyagin. 12, 535 (1967) [174, 1082 (1967)]
- The Crystal Structure of Liriochite. (E) R. V. Kolesova. 12, 538 (1967) [174, 1317 (1967)]
- Group Theoretical Classification of the States of Pairs and Complexes of Paramagnetic Impurity Ions in Crystals. (T) S. V. Vonsavskii, V. I. Cherpanov, A. N. Men', and A. E. Nikiforov. 12, 570 (1967) [174, 783 (1967)]
- Frequency Spectrum of Silicon Lattice Vibrations. (T) N. N. Sirota and T. D. Sokolovskii. 12, 581 (1967) [174, 797 (1967)]
- Mechanical Strength of Tungsten Microcrystals. (E) R. I. Garber, Zh. I. Dranov, and I. M. Mikhailovskii. 12, 584 (1967) [174, 1044 (1967)]
- Characteristics of the Polymorphic Transformation in Iron Containing Small Amounts of Carbon. (E) L. I. Kogan, G. A. Faivilevich, and R. I. Entin. 12, 625 (1967) [174, 811 (1967)]
- Study of Etch Figures on Cadmium Single Crystals. (E) Yu. P. Pehenichnov. 12, 633 (1968) [174, 821 (1967)]
- Crystal Structure of Na₂ Cd-Silicate Na₂CdSi₄O₁₀ = Na₂Cd₂(Si₄O₁₀)₂. (E) M. A. Simonov, Yu. K. Egorov-Tiemenko, and N. V. Belov. 12, 662 (1968) [175, 80 (1967)]
- The Relation between the "Spike" Extra Reflections in Laue Patterns of Natural Diamonds and Their Optical Properties. (E) E. V. Sobolev, V. I. Lisovian, and S. V. Lenskaya. 12, 665 (1968) [175, 582 (1967)]
- The Structure of the Amide Group in p-Bromobenzoyl ethylamine. (E) R. P. Shibaeva, L. O. Atovnyan, and R. G. Kostyanovskii. 12, 669 (1968) [175, 586 (1967)]
- The Structure of Amorphous Germanium, Obtained by Argon Ion Bombardment of the Crystalline Form. (E) P. V. Pavlov and D. I. Tetelbaum. 12, 746 (1968) [175, 823 (1967)]
- Transition of Silicon Carbide from the Hexagonal to the Cubic Phase under the Influence of High Pressures and High Temperatures. (E) M. I. Sokhor, V. G. Kondakov, and L. I. Fel'dgun. 12, 749 (1968) [175, 826 (1967)]
- Spontaneous Growth of Magnesium Oxide Single Crystal Whiskers. (E) P. P. Budnikov, V. A. Perepelitsin, D. B. Sandulov, and V. K. Sturman. 12, 752 (1968) [175, 1045 (1967)]
- Crystal Structure of Mo₂CoSi. (E) E. I. Gladyshevskii, P. I. Krivyakovich, and R. V. Skolozdra. 12, 755 (1968) [175, 1047 (1967)]
- Metastable Structures in Aqueous Solutions. (T) L. D. Kislovskii. 12, 759 (1968) [175, 1277 (1967)]
- Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. (E) V. V. Postnikov, M. I. Ovyannikov, R. G. Logina, R. A. Rubakova, T. N. Sergiyevskaya, and V. A. Tolomarov. 12, 822 (1968) [175, 817 (1967)]
- Recrystallization Diagram of Low-Carbon Iron Obtained by Vacuum Melting. (E) T. V. Simonishvili, B. V. Simonov, and R. A. Tivonenko. 12, 824 (1968) [175, 1039 (1967)]
- Effect of Surface-Active Substances on the Dislocation Distribution in Fatigued Metals. (E) V. V. Shevelva and B. I. Kostetskii. 12, 836 (1968) [175, 1270 (1967)]
- Hydrothermal Synthesis and Symmetry of Crystals on the Oxytungenes Ln₂W₂O₇ (Ln = Ce, Pr, and Nd). (E) P. V. Klevtsov, L. Yu. Kharchenko, and R. F. Klevtsova. 12, 851 (1968) [176, 575 (1967)]
- Calculation of the Elastic Constants of Quasitropic Polycrystalline Materials. (T) K. S. Aleksandrov. 12, 872 (1968) [176, 295 (1967)]
- Study of Solid Solutions in the HgTe-HgS and HgSe-HgS Systems. (E) F. F. Kharchorin, V. M. Petrov, M. V. Pashkovskii, and R. V. Lutsiv. 12, 869 (1968) [176, 62 (1967)]
- Deformation of Brittle Porous Materials under Compressive Stress in a Compression Apparatus. (E) I. I. Cherkasov and Kh. Ibragimov. 12, 876 (1968) [176, 73 (1967)]
- Development of Dislocation Arrays in Surface Layers of Metals under Certain Types of Loading. (E) B. I. Kostetskii and V. V. Shevelva. 12, 882 (1968) [176, 70 (1967)]
- A Study of Crystalline Tungstate-Chloride LnW₂OCl (Ln = Ce, Pr, Nd). (E) L. Yu. Kharchenko, P. V. Klevtsov, and L. P. Solov'eva. 12, 919 (1968) [176, 826 (1967)]
- X-Ray Diffraction Study of ZnF₂ at Pressures up to 130 kbar and at Temperatures of 25 and 300°. (E/T) S. S. Kabalkina, L. F. Vereshchagin, and L. M. Litvin. 12, 945 (1968) [176, 1044 (1967)]
- Electron-Microscope Examination of Chromium; and Molybdenum Deformed under High Pressure. (E) E. D. Martynov, V. I. Trefilov, S. A. Firsov, B. I. Beresnev, and Yu. N. Ryabinin. 12, 956 (1968) [176, 1276 (1967)]
- Günther-Preston Zones in Iron-Chromium Alloys. (E/T) E. Z. Vintaikin and V. Yu. Kolontsov. 12, 962 (1968) [176, 812 (1967)]
- Electron-Microscopic Study of the Spatial Distribution of Nucleated Precipitation Phase in Aging of Cu-Be and Ni-Be Alloys. (E) A. V. Gavrilova, Yu. D. Tyapkin, and M. P. Usikov. 12, 970 (1968) [176, 1052 (1967)]
- Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-CO System. (E) L. V. Kirenikii, S. G. Rusova, G. I. Rusov, and N. I. Sivkov. 12, 977 (1968) [176, 1282 (1967)]
- Crystal Structure of Synthetic Na₂ Zn-Diorthosilicate Na₂Zn₂(Si₄O₁₀)₂. (E) S. T. Amirov, A. V. Nikitin, V. V. Ilyukhin, and N. V. Belov. 12, 987 (1968) [177, 92 (1967)]
- The Crystal Structure of Ammonium Bis-μ-(d-Tartrate)-Disulfate (III). (E) G. A. Kloss, N. I. Golovastikov, A. V. Ablov, and N. V. Belov. 12, 990 (1968) [177, 329 (1967)]
- Morphology and Some Properties of Al₂O₃ Crystals Grown from Tungstate Melts. (E) V. I. Voronkova, V. K. Yanovskii, and V. A. Koptaik. 12, 994 (1968) [177, 571 (1967)]
- Crystal Structure of NaSmSi₄O₁₀. (E) A. V. Chichagov, V. V. Ilyukhin, and N. V. Belov. 12, 997 (1968) [177, 574 (1967)]
- Effect of Thermal Vibrations of the Crystal Lattice on the Anisotropy of Sputtering and Ion-Electron Emission Coefficients of Single Crystals. (E) I. N. Evdokimov, V. A. Molchanov, D. D. Odintsov, and V. M. Chichevov. 12, 1050 (1968) [177, 556 (1967)]
- The Mechanism of Growth of Graphite Crystals in Fe-C-Si Melt. (E) Yu. S. Akhmatov, K. P. Bunin, and Yu. N. Taran. 12, 1069 (1968) [177, 560 (1967)]
- Crystal Structure of Vinogradovite Na₂Ti₂(Si₂O₇)₂(Si₂O₇)₂·nH₂O. (E) R. K. Rastayeva, V. I. Simonov, and N. V. Belov. 12, 1090 (1968) [177, 832 (1967)]

- Dendrite Growth Mechanism of Crystals with the Diamond Structure. (E/T) D. A. Petrov. 12, 1093 (1968) 177, 1075 (1967)
- X-Ray Structural Study of the Double Molybdate $K_2(MoO_4)_2$. (E) R. F. Klevtsova and S. V. Borisov. 12, 1095 (1968) 177, 1333 (1967)
- Irreversible Processes in a System with Internal Rotations. (T) L. A. Pokrovskii. 12, 1135 (1968) 177, 1054 (1967)
- Development of Collective Recrystallization and Polygonization of Silicon Iron in High-Temperature Fatigue Testing. (T/E) M. G. Lozinskiy and N. A. Romanov. 12, 1158 (1968) 177, 1065 (1967)
- Temperature Dependence of the Diffusion Mobility of Metals. (E/T) D. A. Prokoshkin and E. V. "asil'eva. 12, 1162 (1968) 177, 1069 (1967)
- ### CYBERNETICS AND CONTROL THEORY
- Determination of the Regularity of Automata from Their Canonical Equations. (T) B. M. Kloss and V. A. Malyshev. 12, 14 (1967) 172, 543 (1967)
- Optimal Training Algorithms for Automatic Systems with Non-ideal Trainers. (T) V. S. Pugachev. 12, 125 (1967) 172, 1039 (1967)
- Regularization of Statistical Dynamics Problems for Automatic Control Systems. (T) V. V. Solodovnikov and V. L. Lenski. 12, 128 (1967) 172, 1293 (1967)
- A Problem of Motions Encounter. (T) N. N. Krasovskii and V. E. Tretyakov. 12, 205 (1967) 173, 285 (1967)
- One Class of Adaptive Recognition Algorithms. (T) G. M. Adelson-Velskii, P. E. Kunin, and A. A. Leman. 12, 208 (1967) 173, 532 (1967)
- Problem of Game-Theoretic Contact of Motions. (T) N. N. Krasovskii. 12, 210 (1967) 173, 535 (1967)
- Determination of the Continuous Effective Component of Quasi-continuous Sampled-Data Systems. (T) A. A. Bulgakov. 12, 416 (1967) 174, 45 (1967)
- Synthesis of Algorithms for Changing Adjustable Coefficients in Self-adaptive Control Systems with a Model. (T) S. D. Zemlyakov and V. Yu. Rutkovskii. 12, 418 (1967) 174, 47 (1967)
- Variable-Structure Automata. (T) G. A. Agasandyan. 12, 420 (1967) 174, 529 (1967)
- Coupling of Dynamic Production Models into Networks. (T) Yu. P. Krivenkov. 12, 540 (1967) 174, 1284 (1967)
- A Problem of Allocation of Resources in Net Programming (T) L. Ya. Lelfman. 12, 672 (1968) 175, 44 (1967)
- Optimum Strategy for Correction. (T) D. E. Okhotsimskii, V. A. Ryasin, and N. N. Chentsov. 12, 675 (1968) 175, 47 (1967)
- Algorithm for an Approximate Solution of a Certain Problem of Allocation of Resources in Net Programming. (T) I. Ya. Lelfman. 12, 678 (1968) 175, 306 (1967)
- Optimum Training Systems. (T) V. S. Pugachev. 12, 762 (1968) 175, 1022 (1967)
- Optimal Control of Systems with Distributed Parameters. (T) V. I. Plotnikov. 12, 765 (1968) 175, 1238 (1967)
- Synthesis of Optimal-in-the-Mean Automatic Systems. (T) A. I. Propoi and Ya. Z. Tsypkin. 12, 768 (1968) 175, 1242 (1967)
- Estimate of the Complexity of Loss-Free Electrical Line Simulation. (T) V. A. Malyshev. 12, 1000 (1968) 177, 288 (1967)
- The Asymptotic Solution of Equations for a Controllable Process. (T) K. A. Abgaryan. 12, 1098 (1968) 177, 796 (1967)
- Application of Control Feedback for Identification and Estimate of the Stability Margin of Stochastic Plants. (T) V. V. Belyi and M. F. Dimentberg. 12, 1101 (1968) 177, 1030 (1967)
- Generalization of a Theorem of M. Inagaki. (T) I. G. Globenko. 12, 1104 (1968) 177, 1034 (1967)
- Operating Stability of Complex Systems. (T) V. V. Kalashnikov. 12, 1106 (1968) 177, 1294 (1967)
- Optimization of the Synthesis of Technological Automatic Machines. (T) I. I. Artobolevskii, D. Ya. Il'inskiy, and I. I. Kapustin. 12, 1125 (1968) 177, 800 (1967)
- ### DIELECTRICS
- Laws Governing the Nonstationary Current in Metal-Dielectric-Metal Systems. (E) A. S. Gershun and B. L. Timan. 12, 237 (1967) 173, 310 (1967)
- Schottky Emission and Currents in Dielectrics. (T) É. I. Adirovich and L. A. Dubrovskii. 12, 340 (1967) 173, 1032 (1967)
- ### ELASTICITY AND PLASTICITY
- Rheological Properties of Plastic Greases and Frictional Torque in Journal Bearings at Low Speeds. (E) Yu. F. Delinaga and Ya. A. Verbitskii. 12, 82 (1967) 172, 572 (1967)
- Variational Principle of Dynamics in the Linear Theory of Elasticity. (T) L. Ya. Ainola. 12, 92 (1967) 172, 306 (1967)
- Vibrations of Sandwich Beams. (T) A. I. Smirnov. 12, 94 (1967) 172, 561 (1967)
- Vibrations of an Unbounded Laminated Plate in a Gas Flow. (T) A. I. Smirnov. 12, 179 (1967) 172, 801 (1967)
- Unsteady Vibrations of a Free Sandwich Strip. (T) A. I. Smirnov. 12, 182 (1967) 172, 1043 (1967)
- Variational Principles in the Dynamics of the Theory of Shells. (T) L. Ya. Ainola. 12, 184 (1967) 172, 1296 (1967)
- The Stress-Strain Relation in Nonlinear Viscous Elasticity. (T) B. E. Pobedyria. 12, 287 (1967) 173, 62 (1967)
- Concerning a Method for Describing the Viscoelastic Behavior of Polymeric Substances. (T) V. G. Gromov. 12, 289 (1967) 173, 288 (1967)
- Boundary-Value Problems in the Continuum Theory of Dislocations. (T) A. M. Vaisman and I. A. Kunin. 12, 395 (1967) 173, 1024 (1967)
- A Solution of the Generalized Problem of I. Ya. Shiaerman. F. P. Kochanov. 12, 398 (1967) 173, 1028 (1967)
- Rectilinear Stationary Motions of a Viscoplastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 434 (1967) 174, 312 (1967)
- Rectilinear Motion of a Perfectly Plastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 441 (1967) 174, 541 (1967)
- Doubly Periodic Problem in the Theory of a Circular Closed Cylindrical Shell. (T) L. A. Fil'shtinskii. 12, 739 (1968) 175, 312 (1967)
- Solvability of Equations for Intense Bending of Plates. (T) Yu. A. Dubinskii. 12, 839 (1968) 175, 1026 (1967)
- Creep of Metals. (T) T. B. Larina. 12, 842 (1968) 175, 1030 (1967)
- Calculation of the Elastic Constants of Quasitropic Polycrystalline Materials. (T) K. S. Aleksandrov. 12, 872 (1968) 176, 295 (1967)
- Measuring the Compressibility of Gases by the Displacement Method. Nitrogen Compressibility at Pressures up to 10,000 atm and Temperatures to 400°. (E) D. S. Tsiklis and E. V. Polyakov. 12, 901 (1968) 176, 308 (1967)
- Fundamental Boundary Value Problems in Potential Theory for a Space with an Elliptic Slot. The Pressure Due to an Elliptic Die on an Elastic Half-Space. (T) M. D. Martynenko. 12, 914 (1968) 176, 53 (1967)
- Variation of Area of Contact of Solids on Coming into Extremely Close Proximity. (T) N. M. Mikhlin and I. V. Kragelskii. 12, 981 (1968) 176, 1285 (1967)
- Dissipative Function in the Theory of Plastic Media. (T) D. D. Ivlev. 12, 983 (1968) 176, 1037 (1967)
- Distribution of Microcracks in Concrete. (T/E) V. G. Pashkovskii, N. V. Mikhailov, and P. A. Rebinder. 12, 1065 (1968) 177, 314 (1967)
- Contact Problem of Elastoplasticity for Plates. (T) L. A. Galin and G. Ts. Cherepanov. 12, 1074 (1968) 177, 56 (1967)
- Metal Fatigue. (T) T. B. Larina. 12, 1077 (1968) 177, 59 (1967)
- Thermodynamic Relations on the Surface of a Strong Discontinuity in a Finutely Deformed Elastic Medium. (T) E. M. Chernykh. 12, 1079 (1968) 177, 546 (1967)
- Deformation of an Orthotropic Viscoelastic Body under Plane-Problem Conditions. (T) L. A. Galin. 12, 1164 (1968) 177, 808 (1967)

Relations on Surfaces of Discontinuity of Stress in Three-Dimensional Perfectly Rigid-Plastic Solids. (T) G. I. Bykovtsev, D. D. Ivlev, and Yu. M. Myasnyanin. 12, 1167 (1968) [177, 1039 (1967)]
 An Extremum Problem in Thermoelasticity for an Infinite Cylindrical Shell. (T) É. I. Origolyuk, Ya. I. Burak, and Ya. S. Podstrigach. 12, 521 (1967) [174, 534 (1967)]

ELECTRICAL DISCHARGES

Formation of a Long Spark in Air by Weakly Focused Laser Radiation. (E/T) N. G. Isaov, V. A. Bolko, O. N. Krokhin, and G. V. Sklizkov. 12, 248 (1967) [173, 538 (1967)]
 Explosive Generators. (E) E. I. Bichenkov. 12, 567 (1967) [174, 779 (1967)]
 The Electrical Discharge as a Converter of Electrical Energy into Mechanical Energy. (T/E) V. V. Rzhavskii, N. I. Andrienko, D. M. Miguonov, and Yu. I. Protasov. 12, 579 (1967) [174, 795 (1967)]
 Fast Electrons and X-Ray Radiation during the Initial Stage of Growth of a Pulsed Spark Discharge in Air. (E) Yu. L. Stankevich and V. G. Kalinin. 12, 1042 (1968) [177, 72 (1967)]

ELECTRICAL PROPERTIES, EFFECTS, AND ENGINEERING

The Theory of Electroacoustic Phenomena in Solids. (T) É. M. Épstein. 12, 245 (1967) [173, 320 (1967)]
 Electrodynamics of Two-Band Superconductors in the Neighborhood of the Upper Critical Field. (T) V. A. Moskalenko. 12, 256 (1967) [173, 546 (1967)]
 Electromagnetic Potentials and Their Gauging in Anisotropic, Dispersive, and Moving Media. (T) A. Vigin and V. Kashin. 12, 322 (1967) [173, 797 (1967)]
 Schottky Emission and Currents in Dielectrics. (T) É. I. Adirovich and L. A. Dubrovskii. 12, 349 (1967) [173, 1032 (1967)]
 Plasma Resistance as a Function of Electric Field Strength. (E) B. A. Demidov, N. I. Elagin, and S. D. Fanchenko. 12, 467 (1967) [174, 327 (1967)]
 The Electrical Discharge as a Converter of Electrical Energy into Mechanical Energy. (T/E) V. V. Rzhavskii, N. I. Andrienko, D. M. Miguonov, and Yu. I. Protasov. 12, 579 (1967) [174, 795 (1967)]
 Influence of Uniaxial Stresses on the Galvanomagnetic Effect in Thin Ferromagnetic Films. (E) V. A. Buravikhin and V. S. Khristosenko. 12, 603 (1967) [174, 1302 (1967)]
 Hyperfine Structure of the EPR Line with a g Factor ~ 4.3 Due to Mn^{2+} in the Chalcogenide Glasses $Ti_2SeAs_2S_8$, $Ti_2TeAs_2S_8$, and $Ti_2SAs_2S_8$. (E) V. N. Lazukin and I. V. Chepeleva. 12, 606 (1967) [174, 1306 (1967)]
 Faraday Effect and Optical Constants of Iron-Nickel Alloy Films. (E) L. V. Kirenskii, N. I. Syrova, and I. S. Edel'man. 12, 819 (1968) [175, 815 (1967)]
 On Current Divergences. (T) L. Enkovskii, V. V. Kukhtin, L. Montvai, and Nguyen Van Heu. 12, 298 (1967) [173, 298 (1967)]
 Emission Currents in Diodes Having a GaAs-Layer Structure. (E/T) É. I. Adirovich, L. A. Dubrovskii, and L. B. Suzdalkina. 12, 1129 (1968) [177, 1047 (1967)]

ELECTROMAGNETISM

Electromagnetic Potentials and Their Gauging in Anisotropic, Dispersive, and Moving Media. (T) A. Vigin and V. Kashin. 12, 322 (1967) [173, 797 (1967)]
 Electromagnetic Oscillations in a Dielectric Cylinder Located between Reflecting Planes. (T) N. G. Vakhitov. 12, 365 (1967) [173, 818 (1967)]
 Electromagnetic Potentials in Gyrotropic Media. (T) D. N. Chetaev and M. G. Savin. 12, 564 (1967) [174, 1296 (1967)]

ELECTRON AND ION OPTICS

Change in the Angular and Energy Distribution of a Flow of Charged Particles on Passing through a Magnetic Field. (T) G. E. Gernet. 12, 254 (1967) [173, 544 (1967)]
 Effect of the Shape of Electrodes and Poles of Quadrupole Lenses on the Quality of the Image Produced. (T) L. P. Ovsyannikova and S. Ya. Yavor. 12, 261 (1967) [173, 76 (1967)]

Three-Beam Interference of Electrons by Means of an Electrostatic Prism. (E) I. F. Anasikin and I. G. Stoyanova. 12, 447 (1967) [174, 56 (1967)]
 Radiation Effects in Experiments with Colliding Electron Beams. (T) V. N. Baier, V. S. Fadin, and V. A. Khoze. 12, 464 (1967) [174, 323 (1967)]
 The Stability of Motion of a Charged Particle in the Simplest Geometry of a Modulated Magnetic Field. (T) Yu. N. Smirnov and D. A. Frank-Kamenetskii. 12, 609 (1967) [174, 1309 (1967)]
 Stochastic Breakdown of Magnetic Surfaces in a Stellarator. (T) B. V. Chirikov. 12, 612 (1967) [174, 1313 (1967)]
 An Algorithm for the Determination of Parameters of a Particle Moving in a Hydrogen Chamber under Conditions of an Inhomogeneous Magnetic Field and Damping. (T) F. M. Filler. 12, 1138 (1968) [177, 1058 (1967)]
 Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zuev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shorshorov. 12, 500 (1967) [174, 76 (1967)]

ELECTRONS AND POSITRONS

Electron Temperature in Stellar Envelopes Containing High-Energy Electrons. (E) G. A. Gurzadyan. 12, 105 (1967) [172, 1046 (1967)]
 Energy Spectrum of Electrons Emitted from a KCl Single Crystal Bombarded with Helium Ions. (E) A. I. Kondrashev and N. N. Petrov. 12, 217 (1967) [173, 67 (1967)]
 Effect of the Incoherent Component of Electron Scattering on the Quality of the Interference Pattern. (T/E) I. G. Stoyanova and I. F. Anasikin. 12, 357 (1967) [173, 1052 (1967)]
 Acoustoelectric Effect in CdSe under Constant Amplification of Ultrasound by Electron Flow. (T/E) V. I. Pustovoi, V. I. Balbakov, and G. S. Pado. 12, 576 (1967) [174, 791 (1967)]
 Effect of Magnetic Transformations on the Shape of the Angular Distribution of γ Quanta from Positron-Electron Annihilation in Ferromagnetic Materials. (E) I. Ya. Dekhtyar, V. S. Mikhailenkov, and S. G. Sakharova. 12, 618 (1967) [174, 803 (1967)]
 Electron Emission during Vibromechanical Treatment of Polymers. (E) A. M. Polyakov, Yu. F. Kurdubov, N. K. Baramboim, and N. A. Krotova. 12, 720 (1968) [175, 72 (1967)]
 Investigation of Exoelectronic Emission Due to Sliding Friction. (E) V. D. Evdokimov. 12, 732 (1968) [175, 563 (1967)]
 Fast Electrons and X-Ray Radiation during the Initial Stage of Growth of a Pulsed Spark Discharge in Air. (E) Yu. L. Stankevich and V. G. Kalinin. 12, 1042 (1968) [177, 72 (1967)]
 Perturbation Theory for the Expansion Coefficients of a Two-Electron Wave Function. (T) A. M. Ermolaev. 12, 1144 (1968) [177, 1302 (1967)]

ELEMENTARY PARTICLE INTERACTIONS

Two-Photon Absorption in $CaF_2:Ho^{3+}$ Crystals. (E/T) B. V. Erahov, Yu. P. Pimenov, A. M. Prokhorov, and V. B. Fedorov. 12, 47 (1967) [172, 309 (1967)]
 Energy Structure of Collision Cascade of Identical Particles in a Stopping Medium. (T) V. M. Lenchenko and S. V. Starodubsev. 12, 45 (1967) [172, 80 (1967)]
 Electron Temperature in Stellar Envelopes Containing High-Energy Electrons. (E) G. A. Gurzadyan. 12, 105 (1967) [172, 1046 (1967)]
 Energy Exchange in the Interaction of Atoms with the Surface of an Ideal Crystal. (T) Yu. A. Ryzhov and D. S. Strizhenov. 12, 158 (1967) [172, 1309 (1967)]
 Interaction Potentials of H and He Atoms and H_2 Molecules. (E/T) Yu. N. Belyaev and V. B. Leonas. 12, 233 (1967) [173, 306 (1967)]
 Orienting Field and Dipole Polarization. (T) M. F. Vuks. 12, 325 (1967) [173, 801 (1967)]
 Elementary Particles in the Field of a Plane Electromagnetic Wave. (T) F. I. Fedorov. 12, 474 (1967) [174, 354 (1967)]
 Identification of Eich Figures on Tracks of Fission Fragments in Ionic Crystals. (E) I. G. Berzina and I. B. Berman. 12, 484 (1967) [174, 553 (1967)]

Phase Holograms of Tracks in Bubble and Emulsion Chambers and the Feasibility of Interpreting Them. (E) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 590 (1967) [174, 1052 (1967)]

Radiation of Elementary Particles. (T) K. P. Stanyukovich. 12, 808 (1968) [175, 1252 (1967)]

EXPLOSIONS

The Possibility of "Thermal" Explosion and the Structure of the Tungus Meteorite. (T/E) A. V. Zolotov. 12, 101 (1967) [172, 805 (1967)]

Explosive Generators. (E) E. I. Bichenkov. 12, 667 (1967) [174, 779 (1967)]

Destruction of Tubes by Explosion in Liquids under Pressure. (E) E. A. Levin and S. A. Loviya. 12, 639 (1967) [174, 1063 (1967)]

Point Explosion in a Detonating Gas. (T) V. P. Korobeinikov. 12, 1003 (1968) [177, 295 (1967)]

FERROMAGNETS AND FERROELECTRICS

Orienting Field and Dipole Polarization. (T) M. F. Vuks. 12, 325 (1967) [173, 801 (1967)]

The ΔE Effect and Antiferromagnetism in Iron-Manganese Alloys. (E) I. N. Bogachev, V. F. Egozuev, and B. A. Potekhin. 12, 377 (1967) [173, 1295 (1967)]

Effect of Magnetic Transformations on the Shape of the Angular Distribution of γ Quanta from Positron-Electron Annihilation in Ferromagnetic Materials. (E) I. Ya. Dekhtyar, V. S. Mikhailenkov, and S. G. Sakharova. 12, 618 (1967) [174, 803 (1967)]

Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys $Fe(Pd_{1-x}Pt_x)_2$. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorov, R. Z. Abdullin, and R. V. Pospelova. 12, 974 (1968) [176, 1056 (1967)]

Spin Relaxation of Iron in the Ferromagnetic Compounds MnS and $CrTe$ below the Curie Point. (E) S. S. Yakimov, V. A. Gamitskii, V. I. Nikolaev, and S. R. Rodin. 12, 1153 (1968) [177, 1313 (1967)]

FIELD THEORY

The Group of Motions of a Straight Line and the Geometrical Theory of Fields. (T) N. P. Konopleva and G. A. Sokolik. 12, 1016 (1968) [177, 302 (1967)]

The Adiabatic Hypothesis in Axiomatic Field Theory. (T) B. V. Medvedev and M. K. Polivanov. 12, 1118 (1968) [177, 816 (1967)]

FILMS, THIN

The Structure of Oxide Films Obtained by Oxygen Ion Bombardment of a Silicon Surface. (E) P. V. Pavlov and É. V. Shitova. 12, 11 (1967) [172, 588 (1967)]

Thermal Processes in Thin Films. (T) Yu. M. Volokobinski, B. Yu. Lototskii, V. V. Pasyukov, and L. K. Chirkin. 12, 73 (1967) [172, 83 (1967)]

Deposition of a Coating on a Moving Glass Rod. (E/T) B. V. Deryagina, P. S. Kireev, V. A. Ryabov, and D. V. Fedoseev. 12, 176 (1967) [172, 1312 (1967)]

Relaxation of Anomally Large Photo-voltages in Cadmium Telluride Films. (E) É. I. Adirovich and N. Shakirov. 12, 226 (1967) [173, 298 (1967)]

Laws Governing the Nonstationary Current in Metal-Dielectric Metal Systems. (E) A. S. Gershun and B. L. Timan. 12, 237 (1967) [173, 310 (1967)]

Some Peculiarities in the Kinetics of High-Temperature Creep and Fracture in Thin Electrolytic Metal Films. (E/T) B. Ya. Pines and R. L. Kuznetsova. 12, 264 (1967) [173, 79 (1967)]

Load Endurance of Thin Electrolytic Copper Films under Longitudinal and Subsequent Transverse Loading. (E) B. Ya. Pines and R. L. Kuznetsova. 12, 272 (1967) [173, 329 (1967)]

Influence of Uniaxial Stresses on the Galvanomagnetic Effect in Thin Ferromagnetic Films. (E) V. A. Buravikhin and V. S. Khristosenko. 12, 603 (1967) [174, 1302 (1967)]

Measurement of Magnetostriction in Thin Nickel Films. (T/E) K. A. Yakovleva and V. A. Buravikhin. 12, 701 (1968) [175, 66 (1967)]

Study of Defects in Mutually Oriented Polycrystalline Bi-Sb Thin Films by the Moiré Method. (E) L. S. Palatnik, V. M. Kosevich, and A. I. Fedorenko. 12, 717 (1968) [175, 69 (1967)]

Faraday Effect and Optical Constants of Iron-Nickel Alloy Films. (E) L. V. Kirenski, N. I. Syrova, and I. S. Edel'man. 12, 819 (1968) [175, 813 (1967)]

Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-Co System. (E) L. V. Kirenski, S. G. Rusova, G. I. Rusov, and N. I. Sivkov. 12, 977 (1968) [175, 1282 (1967)]

Emission Currents in Diodes Having a GaAs-Layer Structure. (E/T) É. I. Adirovich, L. A. Dubrovskii, and L. B. Suzdalkina. 12, 1129 (1968) [177, 1047 (1967)]

FLUID DYNAMICS

Probability Distribution of the Square of the Temperature Difference between Two Points of a Turbulent Flow. (E/T) A. S. Gurvich. 12, 17 (1967) [172, 554 (1967)]

Asymptotic Law of Propagation of a Plane Detonation Wave. (T) G. G. Chernyi. 12, 21 (1967) [172, 558 (1967)]

Some Two-Dimensional Self-Similar Flows of a Polytopic Gas with Variable Entropy. (T) A. F. Sidorov. 12, 189 (1967) [173, 58 (1967)]

Characteristics of the Heat Transfer to a Turbulent Fluid Flow at Supercritical Pressure. (E/T) N. L. Kafengauz. 12, 278 (1967) [173, 557 (1967)]

Equations for Short Waves in a Viscous Heat-Conducting Gas. (T) G. M. Shefter. 12, 297 (1967) [173, 785 (1967)]

Boundary Conditions for the Navier-Stokes Equations in a Rarefied Gas. (T) R. G. Barantsev and M. O. Lutset. 12, 300 (1967) [173, 1021 (1967)]

Motion of an Ideal Fluid in a Coriolis Force Field. (T) I. I. Vainstein and M. A. Gol'dshikh. 12, 303 (1967) [173, 1277 (1967)]

Application of the Method of Bhatnagar, Gross, and Krook to the Determination of the Velocity of Thermal Slip of a Gas Past a Surface. (T) B. V. Deryagina, Yu. I. Yalamov, and I. N. Ivchenko. 12, 362 (1967) [173, 1287 (1967)]

The Three-Dimensional Cauchy-Poisson Problem for Waves on the Surface of a Viscous Liquid of Finite Depth. (T) A. K. Nikitin and É. N. Poteyunko. 12, 422 (1967) [174, 50 (1967)]

The Solution of a Diffusion Problem with a Nonlinear Boundary Condition. (T) N. N. Kochina. 12, 425 (1967) [174, 305 (1967)]

Propagation of Unsteady Waves in a Rotating Channel of Constant Depth. (T) V. V. Musatov. 12, 428 (1967) [174, 309 (1967)]

A Model for Continuous Media. (T) V. F. D'yachenko. 12, 544 (1967) [174, 760 (1967)]

Motion of Particles Suspended in Turbulent Flow. (T) V. G. Levich and S. I. Kuchanov. 12, 546 (1967) [174, 763 (1967)]

Energy Dissipation in a Turbulent Gas Containing Suspended Particles. (T) S. I. Kuchanov and V. G. Levich. 12, 549 (1967) [174, 1033 (1967)]

Destruction of Tubes by Explosion in Liquids under Pressure. (E) E. A. Levin and S. A. Loviya. 12, 639 (1967) [174, 1063 (1967)]

The Mechanism Responsible for the Adhesion of a Fluid Jet to the Wall of a Fluid Amplifier - The Coanda Effect. (E) K. K. Shal'nev, B. A. Chernyavskii, and Yu. S. Demidov. 12, 680 (1968) [175, 55 (1967)]

Some Particular Solutions of the Equations Describing Axially Symmetric Motion of a Gravitating Rarefied Plasma. (T) E. V. Ryazanov. 12, 684 (1968) [175, 309 (1967)]

System of Boundary Layer Equations for Axisymmetric Flow. (T) O. A. Oleinik. 12, 770 (1968) [175, 777 (1967)]

Invariant Solutions of Equations Describing the Motion of Fluids and Gases in Long Pipes. (T) M. G. Sukharev. 12, 774 (1968) [175, 781 (1967)]

- Use of an Interferometer with a Diffraction Grating to Investigate Flow around Models in a Shock Tube. (T) L. A. Vasil'ev, I. V. Ershov, É. V. Sokolenko, and V. I. Yanichkin. 12, 802 (1968) [175, 1245 (1967)]
- Long-Time Behavior of the Solution of the Cauchy-Poisson Problem. (T) E. K. Isakova. 12, 854 (1968) [176, 50 (1967)]
- Calculation of the Flow in a Laval Nozzle. (T) U. G. Pirumov. 12, 857 (1968) [176, 287 (1967)]
- Acceleration of Molecular Transport Processes in a Turbulent Flow. (T) V. A. Frost. 12, 921 (1968) [176, 794 (1967)]
- One Condition for the Breakdown of the Region of Continuous Supersonic Flow in the Flow Around a Convex Profile with a Detached Shock Wave. (T) E. G. Shifrin. 12, 924 (1968) [176, 797 (1967)]
- Initial Stages of Two-Dimensional Nonstationary Gas Flow. (T) L. N. Gorskova and K. P. Stanyukovich. 12, 927 (1968) [176, 1270 (1967)]
- The Differential Equations for the Filtration of a Gas-Liquid System Taking Account of Mass Transfer of Residual Water. (T) A. Kh. Mirzadzhanzade, Z. M. Akhtedov, and T. A. Same-dov. 12, 930 (1968) [176, 1036 (1967)]
- Point Explosion in a Detonating Gas. (T) V. P. Korobelnikov. 12, 1003 (1968) [177, 295 (1967)]
- Kinetic Equations for a Vortex Field. (T) E. A. Novikov. 12, 1006 (1968) [177, 299 (1967)]
- Motion of a Rigid Sphere under the Influence of an Acoustic Pressure Wave. (T) É. I. Grigolyuk and A. G. Gorskova. 12, 1009 (1968) [177, 539 (1967)]
- Gas-Kinetic Analysis of the Thermal Slip Velocity of a Gas near a Solid Surface. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 1044 (1968) [177, 74 (1967)]
- Unsteady Escape of Gas in a Constant Gravity Field. (T) K. P. Stanyukovich and K. Dzhusupov. 12, 1110 (1968) [177, 804 (1967)]
- Equations for Finite Dimensional Probability Distributions of a Field of Turbulence. (T) A. S. Monin. 12, 1113 (1968) [177, 1036 (1967)]
- ### FRICITION AND WEAR
- Rheological Properties of Plastic Greases and Frictional Torque in Journal Bearings at Low Speeds. (E) Yu. F. Deinega and Ya. A. Verbitskii. 12, 82 (1967) [172, 572 (1967)]
- Frictional Properties of Rubber-like Polymers at High Temperatures under Vacuum. (E) A. I. El'kin and V. N. Nikolaev. 12, 384 (1967) [173, 1302 (1967)]
- Controlling and Adhesion Component of Friction. (E) E. A. Dukhovskii, I. V. Kragelskii, and A. A. Silin. 12, 730 (1968) [175, 560 (1967)]
- Investigation of Exoelectronic Emission Due to Sliding Friction. (E) V. D. Evdokimov. 12, 732 (1968) [175, 563 (1967)]
- Influence of Surface-Active Lubricants on Internal Stresses in Reversing Sliding. (E) V. D. Evdokimov. 12, 817 (1968) [175, 810 (1967)]
- Effect of Surface-Active Substances on the Dislocation Distribution in Fatigued Metals. (E) V. V. Shevelya and B. I. Kostetskii. 12, 836 (1968) [175, 1270 (1967)]
- ### GASES
- Flow of a Rarefied Gas Past a Sphere. (E/T) I. F. Zavarzina and I. V. Skokov. 12, 1 (1967) [172, 547 (1967)]
- Equations for Short Waves in a Viscous Heat-Conducting Gas. (T) G. M. Shefter. 12, 297 (1967) [173, 785 (1967)]
- Boundary Conditions for the Navier-Stokes Equations in a Rarefied Gas. (T) R. G. Barantsev and M. O. Lutet. 12, 300 (1967) [173, 1021 (1967)]
- Nonlinear Effect of the Formation of a Self-sustaining High-Temperature Conducting Gas Layer in Nonstationary Magneto-hydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samar-skii, L. A. Zaklyaz'minskii, P. P. Volosevich, L. M. Degtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]
- Application of the Method of Bhatnagar, Gross, and Krook to the Determination of the Velocity of Thermal Slip of a Gas Past a Surface. (T) B. V. Deryagin, Yu. I. Yalamov, and I. N. Ivchenko. 12, 362 (1967) [173, 1287 (1967)]
- Relation of the Bohm Criterion to Ambipolar Sound Generation in Positive-Column Gas Discharge Plasmas. (T/E) V. V. Vladimirov. 12, 490 (1967) [174, 560 (1967)]
- Energy Dissipation in a Turbulent Gas Containing Suspended Particles. (T) S. I. Kuchanov and V. G. Levich. 12, 549 (1967) [174, 1033 (1967)]
- Theory of Motion of Large Volatile Particles in Diffusing Gas Mixtures. (T) B. V. Deryagin and Yu. I. Yalamov. 12, 587 (1967) [174, 1048 (1967)]
- A Theory of the Motion of Solution Drops in a Diffusing Binary Gas Mixture. (T) B. V. Deryagin and Yu. I. Yalamov. 12, 694 (1968) [175, 59 (1967)]
- Velocity Distribution Function of the Gas Molecules near a Solid Wall in a Nonuniformly Heated Gas. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 714 (1968) [175, 549 (1967)]
- Invariant Solutions of Equations Describing the Motion of Fluids and Gases in Long Pipes. (T) M. G. Sukharev. 12, 774 (1968) [175, 781 (1967)]
- Variational Principles for the Equations of the Kinetic Theory of Gases. (T) A. M. Kogan. 12, 777 (1968) [175, 785 (1967)]
- Flow of a Viscous Gas near a Wall with a Corner. (T) I. Yu. Brailovskaya. 12, 845 (1968) [176, 549 (1967)]
- Measuring the Compressibility of Gases by the Displacement Method. Nitrogen Compressibility at Pressures Up to 10,000 atm and Temperatures to 400°. (E) D. S. Tsiklis and E. V. Polyakov. 12, 901 (1968) [176, 308 (1967)]
- Initial Stages of Two-Dimensional Nonstationary Gas Flow. (T) I. N. Gorskova and K. P. Stanyukovich. 12, 927 (1968) [176, 1270 (1967)]
- Point Explosion in a Detonating Gas. (T) V. P. Korobelnikov. 12, 1003 (1968) [177, 295 (1967)]
- Gas-Kinetic Analysis of the Thermal Slip Velocity of a Gas near a Solid Surface. (T) Yu. I. Yalamov, I. N. Ivchenko, and B. V. Deryagin. 12, 1044 (1968) [177, 74 (1967)]
- Unsteady Escape of Gas in a Constant Gravity Field. (T) K. P. Stanyukovich and K. Dzhusupov. 12, 1110 (1968) [177, 804 (1967)]
- ### GLASS
- Paramagnetic Resonance of Fluoborates Glasses Containing Cobalt and Nickel. (E) D. M. Yudin, G. A. Tsurikova, and G. T. Petrovskii. 12, 337 (1967) [173, 815 (1967)]
- Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Kalaktionova, V. F. Egorova, V. S. Zubkova, A. A. Mak, and D. S. Prilezhaev. 12, 360 (1967) [173, 1284 (1967)]
- Controlled Hardening of Glass by Quenching in Liquids. (E) I. A. Boguslavskii. 12, 380 (1967) [173, 1298 (1967)]
- Electron Paramagnetic Resonance of Rare-Earth Elements in Glasses. (E) T. S. Altshuler. 12, 481 (1967) [174, 549 (1967)]
- Hyperfine Structure of the EPR Line with a g Factor ~ 4.3 Due to Mn^{2+} in the Chalcogenide Glasses $Ti_2Se_3As_2Se_3$, $Ti_2S_3As_2S_3$, and $Ti_2Te_3As_2Te_3$. (E) V. N. Lazukin and I. V. Chepeleva. 12, 606 (1967) [174, 1306 (1967)]
- Structure of Glass Fibers. (E) G. M. Bartenev and R. G. Chernyakov. 12, 615 (1967) [174, 800 (1967)]
- Hyperfine Structure of the Electron Paramagnetic Resonance Spectra of the Vanadyl Ion in Vanadium-Containing Glasses. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskii. 12, 780 (1968) [175, 789 (1967)]
- The Nature of the Deformation of Inorganic Glasses during Microindentation. (E) G. M. Bartenev and D. S. Sanditov. 12, 889 (1968) [176, 66 (1967)]
- Electron Paramagnetic Resonance Study of the Mechanism of Electrical Conductivity in the Glasses of the Ternary System $V_2O_5-P_2O_5-WO_3$. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskii. 12, 1046 (1968) [177, 310 (1967)]

- Formation of a Long Spark in Air by Weakly Focused Laser Radiation. (E/T) N. G. Basov, V. A. Boiko, O. N. Krokhin, and G. V. Sklizkov. 12, 248 (1967) [173, 538 (1967)]
- A Model for the Reflection of Ions from a Single Crystal. (T) V. M. Kivilis, É. S. Partlis, and N. Yu. Turavev. 12, 328 (1967) [173, 805 (1967)]
- Identification of Etch Figures on Tracks of Fission Fragments in Ionic Crystals. (E) I. G. Berzina and I. B. Berman. 12, 484 (1967) [174, 553 (1967)]
- Multiphoton Excitation of Organic Molecules. (E) A. M. Prokhorov, V. D. Shigorin, and G. P. Shipilov. 12, 783 (1968) [175, 793 (1967)]
- Dependence of the Vibrational Deactivation of the Iodine Molecule on the Ratio of the Collision Time to the Period of Vibration. (E) N. A. Generalov and V. D. Kosyngin. 12, 796 (1968) [175, 1033 (1967)]
- The Kinetics of Healing of Fission-Fragment Tracks in Thin mica Sheets. (E/T) Ya. E. Geguzin, I. G. Berzina, and I. V. Vorob'eva. 12, 814 (1968) [175, 807 (1967)]
- Plasma Ionization Instability in Crossed Fields. (E) I. Ya. Shipuk and S. V. Pashkina. 12, 959 (1968) [175, 1278 (1967)]
- Effect of Thermal Vibrations of the Crystal Lattice on the Anisotropy of Sputtering and Ion-Electron Emission Coefficients of Single Crystals. (E) I. N. Evdokimov, V. A. Molchanov, D. D. Odintsov, and V. M. Chicherov. 12, 1050 (1968) [177, 550 (1967)]
- ### IRRADIATION EFFECTS
- The Structure of Oxide Films Obtained by Oxygen Ion Bombardment of a Silicon Surface. (E) P. V. Pavlov and É. V. Shitova. 12, 11 (1967) [172, 588 (1967)]
- Energy Structure of Collision Cascade of Identical Particles in a Stopping Medium. (T) V. M. Lenchenko and S. V. Starodubtsev. 12, 45 (1967) [172, 80 (1967)]
- Two-Photon Absorption in $\text{CaF}_2:\text{Ho}^{3+}$ Crystals. (E/T) B. V. Ershov, Yu. P. Pimenov, A. M. Prokhorov, and V. B. Fedorov. 12, 47 (1967) [172, 309 (1967)]
- Physical Nature of the Hardening of Steels under the Influence of Light Pulses. (E) L. I. Mirkin and N. F. Filipetskii. 12, 89 (1967) [172, 589 (1967)]
- Effect of X Radiation on Mutual Diffusion in Single Crystals of Alkali Halides. (E) Ya. E. Geguzin and Yu. I. Boiko. 12, 161 (1967) [172, 820 (1967)]
- Energy Spectrum of Electrons Emitted from a KCl Single Crystal Bombarded with Helium Ions. (E) A. I. Kondarshev and N. N. Petrov. 12, 217 (1967) [173, 67 (1967)]
- Polarization Effects in Coulomb Scattering of 4-MeV Neutrons by Copper, Lead, and Uranium. (E/T) G. V. Gorlov, N. S. Lebedeva, and V. M. Morozov. 12, 451 (1967) [174, 60 (1967)]
- The Structure of Amorphous Germanium, Obtained by Argon Ion Bombardment of the Crystalline Form. (E) P. V. Pavlov and D. I. Tetelbaum. 12, 746 (1968) [175, 823 (1967)]
- The Anomalous Energy Dependence of the Polarization of the Radiation from Atoms Excited by a Beam of Electrons. (T) G. V. Sholin. 12, 811 (1968) [175, 1256 (1967)]
- Effect of Electron Bombardment on the Mechanical Properties of High-Strength Steel. (E) B. A. Prussakov, D. A. Prokoshkin, L. N. Bystror, and L. I. Ivanov. 12, 912 (1968) [176, 568 (1967)]
- Mechanism of Formation of Hydrocarbon Impurities on Surfaces Irradiated by a Narrow Electron Beam. (E/T) G. I. Shadov and V. N. Vertsner. 12, 942 (1968) [176, 1040 (1967)]
- Effect of Thermal Vibrations of the Crystal Lattice on the Anisotropy of Sputtering and Ion-Electron Emission Coefficients of Single Crystals. (E) I. N. Evdokimov, V. A. Molchanov, D. D. Odintsov, and V. M. Chicherov. 12, 1050 (1968) [177, 550 (1967)]
- ### LIQUIDS
- Investigation of the Hyperacoustic Properties of Liquids by Means of a Helium-Neon Laser. (E/T) L. V. Lashina, Yu. G. Shoroshov, and M. I. Shukhparonov. 12, 220 (1967) [173, 70 (1967)]
- Influence of Sc_2O_3 on Magnetic Properties of Ferrite Cores of the Copper-Manganese System. (E) D. E. Bondarev and Yu. M. Khomyakov. 12, 724 (1968) [175, 553 (1967)]
- Metastable Structures in Aqueous Solutions. (T) L. D. Kislovskii. 12, 759 (1968) [175, 1277 (1967)]
- Invariant Solutions of Equations Describing the Motion of Fluids and Gases in Long Pipes. (T) M. G. Sukharev. 12, 774 (1968) [175, 781 (1967)]
- Influence of Surface-Active Lubricants on Internal Stresses in Reversing Sliding. (E) V. D. Evdokimov. 12, 817 (1968) [175, 810 (1967)]
- The Influence of the Hydrodynamic Interaction on the Intermolecular Contribution to the Magnetic Relaxation Time in Liquids. (T/E) T. N. Khazanovich. 12, 886 (1968) [176, 560 (1967)]
- The Differential Equations for the Filtration of a Gas-Liquid System Taking Account of Mass Transfer of Residual Water. (T) A. Kh. Mirzadzhanzade, Z. M. Akhmedov, and T. A. Same-dov. 12, 930 (1968) [176, 1035 (1967)]
- Study of the Critical State of a Liquid Gravitational Waves. (E/T) M. Sh. Gitterman. 12, 1141 (1968) [177, 1298 (1967)]
- ### MAGNETIC PROPERTIES AND EFFECTS
- Change in the Angular and Energy Distribution of a Flow of Charged Particles on Passing through a Magnetic Field. (T) G. E. Gernet. 12, 254 (1967) [173, 544 (1967)]
- Temperature Dependence of the First Magnetic-Anisotropy Constant of Ferrite Single Crystals with Spinel Structure as a Function of the Saturation Magnetization. (E) A. I. Drokina. 12, 454 (1967) [174, 64 (1967)]
- Group Theoretical Classification of the States of Pairs and Complexes of Paramagnetic Impurity Ions in Crystals. (T) S. V. Vosnovskii, V. I. Cherepanov, A. N. Men', and A. E. Nikiforov. 12, 570 (1967) [174, 783 (1967)]
- The Stability of Motion of a Charged Particle in the Simplest Geometry of a Modulated Magnetic Field. (T) Yu. N. Smirnov and D. A. Frank-Kamenetskii. 12, 609 (1967) [174, 1309 (1967)]
- Magnetic Moments and Ionic Charges of Components of Binary Alloys of Metals of the Iron Group. Strongly Nonideal Solid Solutions. (T) B. G. Lyashchenko. 12, 630 (1967) [174, 817 (1967)]
- Absorption of Ultrasound by Free Electrons of a Metal in a Quantizing Magnetic Field. (T) P. S. Zyryanov and B. N. Filippov. 12, 698 (1968) [175, 63 (1967)]
- Measurement of Magnetostriction in Thin Nickel Films. (T/E) K. A. Yakovleva and V. A. Buravikhin. 12, 701 (1968) [175, 66 (1967)]
- Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. (E) Ya. S. Shur, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko. 12, 793 (1968) [175, 804 (1967)]
- The Influence of the Hydrodynamic Interaction on the Intermolecular Contribution to the Magnetic Relaxation Time in Liquids. (T/E) T. N. Khazanovich. 12, 886 (1968) [176, 560 (1967)]
- Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. (E) N. F. Aleksevskii, O. S. Ivanov, I. I. Raevskii, and N. V. Stepanov. 12, 896 (1968) [176, 305 (1967)]
- Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys $\text{Fe}(\text{Pd}_x\text{Pt}_{1-x})_2$. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorov, R. Z. Abdullor, and R. V. Pospelova. 12, 974 (1968) [176, 1056 (1967)]
- Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-Co System. (E) L. V. Kirenskii, S. G. Rusova, G. I. Rusov, and N. I. Sivkov. 12, 977 (1968) [176, 1282 (1967)]
- An Algorithm for the Determination of Parameters of a Particle Moving in a Hydrogen Chamber under Conditions of an Inhomogeneous Magnetic Field and Damping. (T) F. M. Filler. 12, 1138 (1968) [177, 1058 (1967)]
- Pair Correlations in Polycyclic Molecules. (E/T) V. Z. Kresin. 12, 1147 (1968) [177, 1306 (1967)]

Behavior of the Critical Current in Wires of Superconducting Niobium Alloys as a Function of Magnetic Field and Temperature. (E) B. G. Lazarev, L. S. Lazareva, and S. I. Goridov. 12, 1150 (1968) [177, 1310 (1967)]

Spin Relaxation of Iron in the Ferromagnetic Compounds MnS and CrTe below the Curie Point. (E) S. S. Yakimov, V. Ya. Gamitskii, V. I. Nikol'sev, and S. R. Rodin. 12, 1153 (1968) [177, 1313 (1967)]

MAGNETOHYDRODYNAMICS

Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magnetohydrodynamic Processes. (T) A. N. Tikhonov, A. A. Samarskii, L. A. Zaklyaz'minskii, P. P. Volosovitch, L. M. Dogtyarev, S. P. Kurdyumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorskii. 12, 331 (1967) [173, 808 (1967)]

Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Galaktionova, V. F. Egorova, V. S. Zubkova, A. A. Mak, and D. S. Prilezhaev. 12, 360 (1967) [173, 1284 (1967)]

Stochastic Breakdown of Magnetic Surfaces in a Stellarator. (T) B. V. Chirikov. 12, 612 (1967) [174, 1313 (1967)]

A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheindlin, E. I. Asinovskii, V. V. Sychev, B. B. Zemenchik, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]

MASERS AND LASERS

Spectroscopic Investigation of Gas Discharge for Argon Ion-Optical Lasers. (E) V. F. Kitaeva, Yu. I. Osipov, and N. N. Sobolev. 12, 55 (1967) [172, 317 (1967)]

The Effect of Generation Self-cutoff in a Ruby Laser. (E) V. L. Broude, V. I. Krovchenko, P. P. Pogoretskii, E. N. Sal'kova, and M. S. Soskin. 12, 214 (1967) [173, 64 (1967)]

Investigation of the Hyperacoustic Properties of Liquids by Means of a Helium-Neon Laser. (E/T) L. V. Lashina, Yu. G. Shorosh, and M. I. Shakhparonov. 12, 220 (1967) [173, 70 (1967)]

Negative-Ion Gas Laser. (T) B. M. Smirnov. 12, 242 (1967) [173, 316 (1967)]

Formation of a Long Spark in Air by Weakly Focused Laser Radiation. (E/T) N. G. Basov, V. A. Boiko, O. N. Krokhin, and G. V. Sklizkov. 12, 248 (1967) [173, 538 (1967)]

One Possibility of Increasing the Q of the Resonator of a Neodymium Laser. (E) O. N. Voron'ko, N. A. Kozlov, A. A. Mak, B. G. Malinin, and A. I. Stepanov. 12, 252 (1967) [173, 542 (1967)]

Possibility of Modulating the Radiation of a Semiconductor Laser by Heating the Current Carriers. (T) N. G. Basov, Yu. M. Popov, and A. V. Uspenski. 12, 343 (1967) [173, 1036 (1967)]

Luminescence Quantum Yield and Energy Output of Stimulated Radiation in Neodymium Glass. (E/T) N. M. Galaktionova, V. F. Egorova, V. S. Zubkova, A. A. Mak, and D. S. Prilezhaev. 12, 360 (1967) [173, 1284 (1967)]

Quasi-Continuous Laser on a $\text{CaF}_2\text{-Dy}^{3+}$ Base with Pyrotechnic Excitation. (E) A. I. Bodretsova, A. A. Kaminskii, S. I. Levikov, and V. V. Osiko. 12, 507 (1967) [174, 337 (1967)]

Radiation Dynamics Equations for Lasers. (T) Yu. A. Tarasov and T. N. Zubarev. 12, 598 (1967) [174, 1060 (1967)]

Allowance for Nonideal Contact in Laser Welding of Different Materials. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 636 (1967) [174, 824 (1967)]

Effects of Peak Frequency in a Laser Pulse on the Heating of Metal Sheets. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 644 (1967) [174, 1068 (1967)]

Possibility of Unidirectional Oscillation in a Gaseous Traveling Wave Laser. (T) S. G. Zeiger. 12, 1054 (1968) [177, 554 (1967)]

Spectrum-Time Studies of $\text{CaF}_2\text{-Sm}^{2+}$ Crystal Generation for Excitation by a Ruby Laser. (E) V. M. Marchenko and A. M. Prokhorov. 12, 1057 (1968) [177, 557 (1967)]

MATHEMATICAL PHYSICS

Permutation Groups of the Representations of the Groups G_2 and SU_3 . (T) S. I. Alishauskas, Z. B. Rudzikas, and A. P. Yutis. 12, 23 (1967) [172, 58 (1967)]

Method of Rectifying the Fronts for Many-Front One-Dimensional Stefan-Type Problems. (T) A. B. Uspenski. 12, 26 (1967) [172, 61 (1967)]

Theory of Rectification under the Influence of a Random External Field. (T) G. E. Vekstein and G. M. Zaslavskii. 12, 34 (1967) [172, 69 (1967)]

Mass Formulas in the Theory of Unitary Symmetry. (T) V. G. Kadyshchevskii. 12, 37 (1967) [172, 73 (1967)]

Electromagnetic Waves in the General Theory of Relativity. (T) É. Ya. Malchbaeva. 12, 57 (1967) [172, 320 (1967)]

Momentum and Energy of Gravitational Waves. (T) M. F. Shirokov and L. I. Bud'ko. 12, 62 (1967) [172, 326 (1967)]

Variational Principles in the Dynamics of the Theory of Shells. (T) L. Ya. Ainola. 12, 184 (1967) [172, 1296 (1967)]

Completeness of Perturbation Theory Amplitudes in Amplitude Space. (T) D. Ya. Petrina. 12, 212 (1967) [172, 295 (1967)]

The Choice of the S Functions in the Method of Contact Transformations. (T) M. R. Aliev and V. T. Aleksanyan. 12, 229 (1967) [173, 302 (1967)]

Possible Formulations of the Principle of Microcausality and Some of Their Consequences. (T) Yu. M. Lomsadze and I. Yu. Krivakii. 12, 239 (1967) [173, 312 (1967)]

The Irreversible Evolution of a Dynamical System Interacting with a Statistical Ensemble. (T) A. V. Shelest. 12, 259 (1967) [173, 550 (1967)]

Properties of the Cluster Decomposition of the Causal S-Matrix. (T) L. Sh. Khodzhaev. 12, 306 (1967) [173, 789 (1967)]

New Formulation of Quantum Theory. (T) A. S. Shvarts. 12, 309 (1967) [173, 793 (1967)]

Matrix Elements of Lorentz Transformations for a Unitary Representation. (T) Tao Wong-tyk and Nguyen Van Heu. 12, 312 (1967) [173, 1281 (1967)]

Equations of Motion for a Mechanical System Containing a Variator. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 315 (1967) [173, 1017 (1967)]

The Solution of a Diffusion Problem with a Nonlinear Boundary Condition. (T) N. N. Kochina. 12, 425 (1967) [174, 305 (1967)]

Equation of Radiative Transfer in a Model of Isotropic Point Scatterers. (T) Yu. N. Barabanekov. 12, 431 (1967) [174, 53 (1967)]

Rectilinear Stationary Motions of a Viscoplastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 434 (1967) [174, 312 (1967)]

Green's Function Method in the Ising Model. (T) Yu. G. Rudoi. 12, 437 (1967) [174, 316 (1967)]

Rectilinear Motion of a Perfectly Plastic Medium. (T) P. P. Mosolov and V. P. Myasnikov. 12, 441 (1967) [174, 541 (1967)]

Synthesis of a Mechanical System with Variator in Terms of the Given Motion of One Element. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 444 (1967) [174, 531 (1967)]

Calculation of Radial Integrals for Multipole Transitions in Atomic Spectra. (T) Yu. K. Zemtsov. 12, 470 (1967) [174, 330 (1967)]

Operational Method of Determining Certain Integral Characteristics of Nonstationary Transport Processes in Active Media. (T) V. K. Egerov. 12, 483 (1967) [174, 564 (1967)]

An Extremum Problem in Thermoelasticity for an Infinite Cylindrical Shell. (T) É. I. Grigolyuk, Ya. I. Burnk, and Ya. S. Podtargich. 12, 521 (1967) [174, 534 (1967)]

Thirring Four-Fermion Model and Perturbation Theory. (T) A. V. Astakhov. 12, 552 (1967) [174, 771 (1967)]

The Equations of Electrodynamics for Anisotropic Media. (T) D. N. Chetaev. 12, 555 (1967) [174, 775 (1967)]

Problem of a Hydrodynamic Approximation for the Green's Functions of a Superfluid Bose System. (T) V. A. Krasnikov. 12, 558 (1967) [174, 1037 (1967)]

- A Steady-State Heat Conduction Problem. (T) V. S. Ravin. 12, 561 (1967) [174, 1041 (1967)]
- Electromagnetic Potentials in Gyrotropic Media. (T) D. N. Chetaev and M. G. Savina. 12, 564 (1967) [174, 1296 (1967)]
- Group Theoretical Classification of the States of Pairs and Complexes of Paramagnetic Impurity Ions in Crystals. (T) S. V. Vonsovskii, V. I. Cherepanov, A. N. Men', and A. E. Nikiforov. 12, 570 (1967) [174, 783 (1967)]
- Solution of Equations of the Chew-Low Type. (T) V. A. Meshcheryakov. 12, 583 (1967) [174, 1054 (1967)]
- Investigation of Transition from Linear to Nonlinear Conditions in Parametric Resonance. (T) Yu. N. Smirnov. 12, 596 (1967) [174, 1057 (1967)]
- Phenomenon of Phase Separation at Low Temperatures in Certain Lattice Models of a Gas. (T) R. A. Minlos and Ya. G. Sinai. 12, 688 (1968) [175, 323 (1967)]
- Dispersion Sum Rules in a Static Model. (T) V. G. Pisarenko. 12, 707 (1968) [175, 331 (1967)]
- Doubly Periodic Problem in the Theory of a Circular Closed Cylindrical Shell. (T) L. A. Fil'shtinski. 12, 739 (1968) [175, 312 (1967)]
- Variational Principles for the Equations of the Kinetic Theory of Gases. (T) A. M. Kogan. 12, 777 (1968) [175, 785 (1967)]
- Temperature Green's Functions for Weakly Nonideal Bose-Einstein Systems. (T) V. V. Tolmachev. 12, 790 (1968) [175, 800 (1967)]
- ΔF , Δn , and $\Delta \mu$ Corrections in the Asymptotic Expansion Method in the Modified Formulation of the Problem of a Nonideal Bose-Einstein System. (T) V. V. Tolmachev. 12, 799 (1968) [175, 1036 (1967)]
- Long-Time Behavior of the Solution of the Cauchy-Poisson Problem. (T) E. K. Isakova. 12, 854 (1968) [176, 50 (1967)]
- Determination of the Type of a Space According to Petrov's Classification. (T) R. I. Khrapko. 12, 861 (1968) [176, 56 (1967)]
- The Theory of Constructing Models of Continuous Media. (T) V. A. Zhelezovich. 12, 863 (1968) [176, 283 (1967)]
- On Current Divergences. (T) L. Enkova, V. V. Kukhtin, I. Montval, and Nguyen Van Hieu. 12, 874 (1968) [176, 298 (1967)]
- Fundamental Boundary Value Problems in Potential Theory for a Space with an Elliptic Slot. The Pressure Due to an Elliptic Due on an Elastic Half-Space. (T) M. D. Martynenko. 12, 914 (1968) [176, 53 (1967)]
- The Differential Equations for the Filtration of a Gas-Liquid System Taking Account of Mass Transfer of Residual Water. (T) A. Kh. Mirzadzhanzade, Z. M. Akhmedov, and T. A. Samegov. 12, 930 (1968) [176, 1035 (1967)]
- A Realization of Infinite-Dimensional Representations of the Rotation Group with Complex Spin by Entire Functions. (T) S. S. Sannikov. 12, 932 (1968) [176, 801 (1967)]
- Chronometric Invariance and the Problem of Gravitational Energy. (T) N. V. Mitskevich and José D. Mujica. 12, 939 (1968) [176, 809 (1967)]
- A Uniform Axisymmetrical Cosmological Model in the Ultra-relativistic Case. (T) I. S. Shikin. 12, 950 (1968) [176, 1048 (1967)]
- The Clebsch-Gordan Coefficients of Symmetric Representations of the Group SU_3 . (T) S. I. Alishauskas and A. P. Yutsis. 12, 1012 (1968) [177, 61 (1967)]
- The Group of Motions of a Straight Line and the Geometrical Theory of Fields. (T) N. P. Konopleva and G. A. Sokolik. 12, 1016 (1968) [177, 302 (1967)]
- Local Properties of Unrenormalizable Theories. (T) S. S. Khoruzhii. 12, 1019 (1968) [177, 306 (1967)]
- Approximate Integration of the Rayleigh Equation for Any Nonlinearity. (T) V. V. Kazakevich. 12, 1027 (1968) [177, 291 (1967)]
- Contact Problem of Elastoplasticity for Plates. (T) L. A. Galin and G. Ts. Cherepanov. 12, 1074 (1968) [177, 56 (1967)]
- The Asymptotic Solution of Equations for a Controllable Process. (T) K. A. Abgaryan. 12, 1098 (1968) [177, 796 (1967)]
- Generalization of a Theorem of M. Inagaki. (T) I. G. Globenko. 12, 1104 (1968) [177, 1034 (1967)]
- Operating Stability of Complex Systems. (T) V. V. Kalashnikov. 12, 1106 (1968) [177, 1294 (1967)]
- The Adiabatic Hypothesis in Axiomatic Field Theory. (T) B. V. Medvedev and M. K. Polivanov. 12, 1118 (1968) [177, 816 (1967)]
- The Uniqueness of Solutions of Integral Equations of the Second Kind for Diffraction on Nonclosed Screens. (T) Ya. N. Fel'd. 12, 1122 (1968) [177, 820 (1967)]
- ### MECHANICS
- Equations of Motion for a Mechanical System Containing a Variator. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 315 (1967) [173, 1017 (1967)]
- Optimal Transfer Flights between Close Nearly Circular Noncoplanar Orbits. (T) G. E. Kuzmak and N. I. Lavrenko. 12, 318 (1967) [173, 1273 (1967)]
- Synthesis of a Mechanical System with Variator in Terms of the Given Motion of One Element. (T) I. I. Artobolevskii, V. A. Zinov'ev, and N. V. Umnov. 12, 444 (1967) [174, 531 (1967)]
- Influence of Uniaxial Stresses on the Galvanomagnetic Effect in Thin Ferromagnetic Films. (E) V. A. Baravikhin and V. S. Khristosenko. 12, 603 (1967) [174, 1302 (1967)]
- Determination of Stresses in Solids by the Polarized-Ultrasonic Frequency Method. (E) Yu. A. Nilerder, G. A. Budenkov, and G. Ya. Pochtovik. 12, 641 (1967) [174, 1065 (1967)]
- Phenomenon of Phase Separation at Low Temperatures in Certain Lattice Models of a Gas. (T) R. A. Minlos and Ya. G. Sinai. 12, 688 (1968) [175, 323 (1967)]
- On the Disintegration of the Structure and Strength of Polymer Materials. (E) A. A. Vakulenko, Yu. N. Litov, and V. M. Chebanov. 12, 691 (1968) [175, 539 (1967)]
- The Theory of Constructing Models of Continuous Media. (T) V. A. Zhelezovich. 12, 863 (1968) [176, 283 (1967)]
- The Nature of the Deformation of Inorganic Glasses during Micro-indentation. (E) G. M. Bartenev and D. S. Sanditov. 12, 889 (1968) [176, 66 (1967)]
- Variation of Area of Contact of Solids on Coming into Extremely Close Proximity. (T) N. M. Mikhlin and I. V. Kragelski. 12, 981 (1968) [176, 1285 (1967)]
- Design of Invariant Communication and Measuring Devices. (E) B. N. Petrov, V. A. Viktorov, and V. I. Mishenin. 12, 1023 (1968) [177, 52 (1967)]
- Approximate Integration of the Rayleigh Equation for Any Nonlinearity. (T) V. V. Kazakevich. 12, 1027 (1968) [177, 291 (1967)]
- Relation between Plastic Volume and Shear Deformations and Shock Waves in Soft Solids. (T/E) V. N. Kilaevskii. 12, 1031 (1968) [177, 542 (1967)]
- Optimization of the Synthesis of Technological Automatic Machines. (T) I. I. Artobolevskii, D. Ya. Il'inski and I. I. Kapustin. 12, 1125 (1968) [177, 800 (1967)]
- ### METALLURGY
- Reaction Zone Temperature during the Scavenging of Iron Melts by Gas-Oxygen Mixtures and by Air. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 512 (1967) [174, 566 (1967)]
- Distribution of Impurities in Oxygen-Blown Metal. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 628 (1967) [174, 814 (1967)]
- Effect of a Third Component on the Behavior of Impurities in the Zone Melting of Aluminum. (E) A. I. Belyaev and A. L. Yukova. 12, 827 (1968) [175, 1259 (1967)]
- Possibility of Demonstrating the Migration of Uranium and Its Decay Products in Minerals. (E) I. G. Berzina, A. N. Stolyarova, G. N. Flerov, and Yu. S. Shmel'tevich. 12, 1155 (1968) [177, 1062 (1967)]
- ### METAL PHYSICS
- Theory of Dislocations in the Two-Row Model of a Crystal. (T) A. A. Yudin and I. L. Mirkin. 12, 65 (1967) [172, 330 (1967)]

- Effect of Initial Crystallographic Orientation on the Recrystallization Temperature of Wire Obtained from Molybdenum Single Crystals. (E) E. M. Savitski, G. S. Burkanov, N. N. Bokareva, A. S. Grokhovskii, and E. V. Ottenberg. 12, 76 (1967) [172, 87 (1967)]
- Topography of the Distribution of the Nonequilibrium Concentration of Vacancies Associated with the Mutual Diffusion of Two Components in the Creep Process. (T) M. A. Krishtal and V. I. Strelkov. 12, 86 (1967) [172, 576 (1967)]
- Physical Nature of the Hardening of Steels under the Influence of Light Pulses. (E) L. I. Mirkina and N. F. Pilipetski. 12, 89 (1967) [172, 580 (1967)]
- Dislocation Structure of Ordered Copper-Nickel-Zinc Alloys. (E) V. G. Kurdyumov and L. P. Chupratova. 12, 164 (1967) [172, 823 (1967)]
- Strengthening of Metals by Decorating Dislocations with Surface Active Impurities. (E) V. I. Likhtman, M. A. Krishtal, S. A. Golovin, and I. A. Goncharenko. 12, 167 (1967) [172, 826 (1967)]
- Surface Tension of Melts Belonging to the Tin-Gold System. (E) N. L. Pokrovskii, P. P. Pugachevich, and Kh. I. Bragimov. 12, 170 (1967) [172, 829 (1967)]
- Formation of a Wurtzite-Like Modification of Boron Nitride in Shock Compression. (E) G. A. Adadurov, Z. G. Aliev, L. O. Atomyan, T. V. Ravina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremelin, A. Kh. Muranovich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]
- Laws Governing the Nonstationary Current in Metal-Dielectric Metal Systems. (E) A. S. Gershun and B. L. Timan. 12, 237 (1967) [173, 310 (1967)]
- Some Peculiarities in the Kinetics of High-Temperature Creep and Fracture in Thin Electrolytic Metal Films. (E/T) B. Ya. Pines and R. I. Kuznetsov. 12, 264 (1967) [173, 79 (1967)]
- Effects of Atomic Ordering in Ternary Solid Solutions Based on Ni₃Fe Alloyed with Group VI Elements, Cr, Mo, and W. (E) L. L. Eganysan and Ya. P. Seliskii. 12, 269 (1967) [173, 325 (1967)]
- Load Endurance of Thin Electrolytic Copper Films under Longitudinal and Subsequent Transverse Loading. (E) B. Ya. Pines and R. I. Kuznetsova. 12, 272 (1967) [173, 329 (1967)]
- Superconductivity in the System Nb₃Al-Mo₃Al. (E) N. E. Alekseevskii, I. I. Korolov, N. M. Matveeva, and Yu. A. Maksimov. 12, 275 (1967) [173, 553 (1967)]
- Temperature Dependence of the Critical Shear Stress of Copper-Nickel-Cobalt Alloys. (E) G. I. Nosova and N. T. Travina. 12, 281 (1967) [173, 560 (1967)]
- Structural Transitions in Iron-Carbon Melts. (E/T) E. S. Filippov, V. K. Grigorovich, and A. M. Samarin. 12, 284 (1967) [173, 564 (1967)]
- The Nature of the Kinetics of the Martensitic Transformation of Hot-Worked Austenite. (E/T) I. Ya. Georgieva, G. V. Kurdyumov, O. P. Maksimova, and V. V. Nemirovskii. 12, 368 (1967) [173, 1055 (1967)]
- Effect of Deformation on the Angular Distribution of Annihilation Quanta in Nickel and Copper Alloys. (E) A. A. Adamenko, I. Ya. Dekhtyar, and V. S. Mikhailenko. 12, 374 (1967) [173, 1291 (1967)]
- The ΔE Effect and Antiferromagnetism in Iron-Manganese Alloys. (E) I. N. Bogachev, F. F. Egoiaev, and B. A. Potekhin. 12, 377 (1967) [173, 1295 (1967)]
- Dislocation Structure of Stressed Iron Microcrystals. (E) I. P. Kushnir. 12, 387 (1967) [173, 1306 (1967)]
- The Three-Dimensional Modulated Structure in Alloys of the Ni-Cr Type. (E) Yu. D. Tyshchenko and L. G. Eroshenkova. 12, 391 (1967) [173, 1309 (1967)]
- Polarization Effects in Coulomb Scattering of 4-MeV Neutrons by Copper, Lead, and Uranium. (E/T) G. V. Gorlov, N. S. Lebedeva, and V. M. Morozov. 12, 451 (1967) [174, 60 (1967)]
- Deformation and Fracture of Cementite. (E) A. A. Baranov and O. I. Fomichev. 12, 495 (1967) [174, 71 (1967)]
- Mechanical Strength of Tungsten Microcrystals. (E) R. I. Garber, Zh. I. Dranova, and I. M. Mikhailovskii. 12, 584 (1967) [174, 1044 (1967)]
- Fracture Diagrams of Solids. (E) B. A. Drozdovskii, V. M. Markovchev, and Ya. B. Fridman. 12, 622 (1967) [174, 807 (1967)]
- Characteristics of the Polymorphic Transformation in Iron Containing Small Amounts of Carbon. (E) L. I. Kogan, G. A. Pavlovich, and R. I. Entin. 12, 625 (1967) [174, 811 (1967)]
- Distribution of Impurities in Oxygen-Blown Metal. (E) N. P. Levenets, G. A. Lopukhov, and A. M. Samarin. 12, 628 (1967) [174, 814 (1967)]
- Magnetic Moments and Ionic Charges of Components of Binary Alloys of Metals of the Iron Group. Strongly Nonideal Solid Solutions. (T) B. G. Lyashchenko. 12, 630 (1967) [174, 817 (1967)]
- Study of Etch Figures on Cadmium Single Crystals. (E) Yu. P. Pshenichnov. 12, 633 (1967) [174, 821 (1967)]
- Allowance for Nonideal Contact in Laser Welding of Different Materials. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 636 (1967) [174, 824 (1967)]
- Determination of Stresses in Solids by the Polarized-Ultrasonic Frequency Method. (E) Yu. A. Nilenov, G. A. Budenkov, and G. Ya. Pochtovik. 12, 641 (1967) [174, 1065 (1967)]
- Effects of Peak Frequency in a Laser Pulse on the Heating of Metal Sheets. (T) N. N. Rykalin, A. A. Uglov, and N. I. Makarov. 12, 644 (1967) [174, 1068 (1967)]
- New Data on the Embrittlement of Metals by Liquid Melts. (E) A. P. Savitski and L. K. Savitskaya. 12, 647 (1967) [174, 1072 (1967)]
- Absorption of Ultrasound by Free Electrons of a Metal in a Quantizing Magnetic Field. (T) P. S. Zyrzyanov and B. N. Filippov. 12, 698 (1968) [175, 63 (1967)]
- Measurement of Magnetostriiction in Thin Nickel Films. (T/E) K. A. Yakovleva and V. A. Baravtikhin. 12, 701 (1968) [175, 66 (1967)]
- Study of Defects in Mutually Oriented Polycrystalline Bi-Sb Thin Films by the Moiré Method. (E) L. S. Palatnik, V. M. Kosevich, and A. I. Fedorenko. 12, 717 (1968) [175, 69 (1967)]
- Influence of Fe₂O₃ on Magnetic Properties of Ferrite Cores of the Copper-Manganese System. (E) D. E. Bondarev and Yu. M. Khomyakov. 12, 724 (1968) [175, 553 (1967)]
- Influence of Plastic Deformation on the Mössbauer Effect in Fe-Ni Invar Alloys. (E/T) I. Ya. Dekhtyar, B. G. Egiazarov, L. M. Isakov, V. S. Mikhailenko, and V. P. Romashko. 12, 727 (1968) [175, 556 (1967)]
- Fine Structure of the X-Ray Emission Bands of Elements of the Iron Transition Group. (E) V. V. Nemoshkalenko and V. Ya. Nagornyi. 12, 735 (1968) [175, 566 (1967)]
- Crystal Structure of Mo₃CoSi. (E) E. I. Gladyshevskii, P. I. Krivyakovich, and R. V. Skolozdra. 12, 755 (1968) [175, 1047 (1967)]
- Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. (E) Ya. S. Shur, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko. 12, 793 (1968) [175, 804 (1967)]
- Faraday Effect and Optical Constants of Iron-Nickel Alloy Films. (E) L. V. Kirenski, N. I. Syrova, and I. S. Edel'man. 12, 819 (1968) [175, 813 (1967)]
- Recrystallization Diagram of Low-Carbon Iron Obtained by Vacuum Melting. (E) T. V. Simonishvili, B. V. Simonov, and R. A. Tivonenko. 12, 824 (1968) [175, 1039 (1967)]
- Effect of a Third Component on the Behavior of Impurities in the Zone Melting of Aluminum. (E) A. I. Belyaev and A. I. Yakovlev. 12, 827 (1968) [175, 1259 (1967)]
- The Nature of Decomposition Products and the Precipitation Mechanism in Age Hardening of Commercial Iron. (E) Yu. A. Skakov. 12, 830 (1968) [175, 1263 (1967)]
- Magnesium Borides Prepared under Superhigh-Pressure Conditions. (E) N. E. Filonenko, V. I. Ivanov, I. I. Fel'dgum, M. I. Sokhor, and L. F. Vereshchagin. 12, 833 (1968) [175, 1266 (1967)]

- Effect of Surface-Active Substances on the Dislocation Distribution in Fatigued Metals. (E) V. V. Shevchik and B. I. Kostetskii. 12, 836 (1968) [175, 1270 (1967)]
- Creep of Metals. (T) T. B. Larina. 12, 842 (1968) [175, 1030 (1967)]
- Study of Solid Solutions in the HgTe-HgS and HgSe-HgS Systems. (E) F. F. Kharkhorin, V. M. Petrov, M. V. Pashkovskii, and R. V. Lutsiv. 12, 869 (1968) [176, 62 (1967)]
- Deformation of Brittle Porous Materials under Compressive Stress in a Compression Apparatus. (E) I. I. Cherkasov and Kh. Braginov. 12, 876 (1968) [175, 73 (1967)]
- Development of Dislocation Arrays in Surface Layers of Metals under Certain Types of Loading. (E) B. I. Kostetskii and V. V. Shevchik. 12, 892 (1968) [176, 70 (1967)]
- Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. (E) N. E. Alekseevskii, O. S. Ivanov, I. I. Raevskii, and N. V. Stepanov. 12, 896 (1968) [176, 305 (1967)]
- Mechanism of High-Temperature Creep of Metals with High Stacking-Fault Energy. (T) V. A. Yamshechikov and L. I. Ivanov. 12, 905 (1968) [176, 312 (1967)]
- Influence of Vibration on the Crystallization of Cadmium. (E) D. L. Leichik, N. V. Mikhailov, and P. A. Rebiner. 12, 908 (1968) [176, 564 (1967)]
- Effect of Electron Bombardment on the Mechanical Properties of High-Strength Steel. (E) B. A. Prusakov, D. A. Prokoshkin, L. N. Bystron, and L. I. Ivanov. 12, 912 (1968) [176, 568 (1967)]
- Electron-Microscopic Examination of Chromium and Molybdenum Deformed under High Pressure. (E) E. D. Martynov, V. I. Treilov, S. A. Firatov, B. I. Beresnev, and Yu. N. Ryabinin. 12, 956 (1968) [176, 1276 (1967)]
- Guinier-Preston Zones in Iron-Chromium Alloys. (E/T) E. Z. Vintalnik and V. Yu. Kolontsov. 12, 962 (1968) [176, 812 (1967)]
- Electron-Microscopic Study of the Spatial Distribution of Nucleated Precipitation Phase in Aging of Cu-Be and Ni-Be Alloys. (E) A. V. Gavrilova, Y. D. Tyapkin, and M. P. Usikov. 12, 970 (1968) [176, 1052 (1967)]
- Mechanism of the Antiferro-Ferromagnetic Transition in the System of Ordered Alloys $\text{Fe}(\text{Pt}_x\text{P}_{1-x})_2$. (T/E) V. V. Klyushin, V. V. Kelarev, S. K. Sidorenko, R. Z. Abdulov, and R. V. Pospelova. 12, 974 (1968) [176, 1056 (1967)]
- Some Magnetic Properties of Thin Single-Crystal Films of Alloys of the Fe-Ni-Co System. (E) L. V. Kirenski, S. G. Rusova, G. I. Rusov, and N. I. Sivkov. 12, 977 (1968) [176, 1282 (1967)]
- Nucleation of Martensite in Iron-Nickel Alloys Showing Disruptive Transformation Kinetics. (E/T) O. P. Maksimova and V. V. Nemirovskii. 12, 1062 (1968) [177, 81 (1967)]
- The Mechanism of Growth of Graphite Crystals in Fe-C-Si Melt. (E) Yu. S. Akhmatov, K. P. Bunin and Yu. N. Taran. 12, 1069 (1968) [177, 560 (1967)]
- Peculiarities of the Mechanism of Fast Deformations in Hexagonal-Closed-Packed Metals. (E) O. A. Kaibyshev, Ya. S. Umanski, and G. N. Epshtein. 12, 1072 (1968) [177, 562 (1967)]
- Metal Fatigue. (T) T. B. Larina. 12, 1077 (1968) [177, 59 (1967)]
- Behavior of the Critical Current in Wires of Superconducting Niobium Alloys as a Function of Magnetic Field and Temperature. (E) B. G. Lazarev, L. S. Lazareva, and S. I. Goridov. 12, 1150 (1968) [177, 1310 (1967)]
- Spin Relaxation of Iron in the Ferromagnetic Compounds NiSb and CrTe below the Curie Point. (E) S. S. Yakimov, V. Ya. Gamlatkii, V. I. Nikolaev, and S. R. Rodin. 12, 1153 (1968) [177, 1313 (1967)]
- Development of Collective Recrystallization and Polygonization of Silicon Iron in High-Temperature Fatigue Testing. (T/E) M. G. Lozinakii and A. N. Romanov. 12, 1158 (1968) [177, 1065 (1967)]
- Temperature Dependence of the Diffusion Mobility of Metals. (E/T) D. A. Prokoshkin and E. V. Vasil'eva. 12, 1162 (1968) [177, 1069 (1967)]
- Melting Crystalline Solids by an Electron Beam. (T/E) I. V. Zuev, Yu. L. Krasulin, N. N. Rykalin, A. A. Uglov, and M. Kh. Shorshorov. 12, 500 (1967) [174, 76 (1967)]
- Phase Diagrams and Structure of Some Semiconductor $\text{AlC}_{1-x}\text{V}_x\text{VI}$ Alloys. (E) L. S. Palatnik and E. I. Rogacheva. 12, 503 (1967) [174, 80 (1967)]
- Some Characteristics of the Dislocation Structure of Silicon Iron Single Crystals, Oriented for Slip Along the $\{111\}$ $\{211\}$ Slip System. (E) V. G. Kurdyumov, L. M. Morgul, and L. M. Utevska. 12, 509 (1967) [174, 339 (1967)]
- Superconducting Properties of Vanadium-Niobium Alloys. (E) N. N. Sirota and É. A. Ovsiechuk. 12, 516 (1967) [174, 570 (1967)]
- Kinetics of Fracture under Biaxial Stress. (E) Ya. B. Fridman, T. K. Zilova, and N. I. Novosil'tseva. 12, 518 (1967) [174, 572 (1967)]

METHODS AND INSTRUMENTATION

- Magnetic Field Distribution in a Coaxial Plasma Injector. (E) P. E. Kovrov, A. I. Morozov, L. G. Tokarev, and G. Ya. Shepkin. 12, 155 (1967) [172, 1305 (1967)]
- Design of Invariant Communication and Measuring Devices. (E) B. N. Petrov, V. A. Viktorov, and V. I. Mishchenko. 12, 1023 (1968) [177, 52 (1967)]

MOLECULAR STRUCTURE AND SPECTRA

- Problem of Classifying the Electronic States of Uranyl Compounds. (E/T) L. V. Volod'ko, A. N. Sechenko, and D. S. Umreiko. 12, 153 (1967) [172, 1303 (1967)]
- Interaction Potentials of H and He Atoms and H_2 Molecules. (E/T) Yu. N. Belyaev and V. B. Leonas. 12, 233 (1967) [173, 306 (1967)]
- Calculation of the Energy of Molecular Excitons. (T) A. S. Davydov and É. N. Myasnikov. 12, 346 (1967) [173, 1040 (1967)]
- Two-Photon Absorption Spectrum in CDS near the Fundamental Absorption Edge. (E/T) V. K. Konukhovich, L. A. Kulevskii, and A. M. Prokhorov. 12, 354 (1967) [173, 1048 (1967)]
- Integrated Intensities in the Infrared Absorption Spectra of Methylhexoxalanes $(\text{CH}_3)_n\text{Si}(\text{OC}_2\text{H}_5)_{3-n}$ ($n = 0, 1, 2, 3$). (E) V. A. Arbuzova, I. F. Kovalev, E. N. Tikhomirova, M. G. Voronkov, and L. A. Zhagat. 12, 461 (1967) [174, 320 (1967)]
- Low-Temperature Polarization Spectra of Asymmetric Azabenzoporphyrins and Their Metal Derivatives. (E) A. N. Sechenko, S. F. Shkirman, V. A. Maschenkov, and K. N. Solov'ev. 12, 710 (1968) [175, 545 (1967)]
- Multiphoton Excitation of Organic Molecules. (E) A. M. Prokhorov, V. D. Shigorin, and G. P. Shipilov. 12, 783 (1968) [175, 793 (1967)]
- Spectral Evidence of Interaction between Organic Molecules and the Surface of a TiH Hole Semiconductor. (E) Yu. D. Pimenov. 12, 883 (1968) [176, 556 (1967)]
- Electron Paramagnetic Resonance Study of the Mechanism of Electrical Conductivity in the Glasses of the Ternary System $\text{V}_2\text{O}_5-\text{P}_2\text{O}_5-\text{WO}_3$. (E) L. D. Bogomolova, V. N. Lashkin, and N. V. Petrovskiy. 12, 1046 (1968) [177, 310 (1967)]
- Spectrum-Time Studies of $\text{CaF}_2:\text{Sm}^{2+}$ Crystal Generation for Excitation by a Ruby Laser. (E) V. M. Marchenko and A. M. Prokhorov. 12, 1057 (1968) [177, 557 (1967)]
- Pair Correlations in Polycyclic Molecules. (E/T) V. Z. Kresin. 12, 1147 (1968) [177, 1306 (1967)]

OPTICAL PROPERTIES AND TECHNIQUES

- Resolving Power of a Hologram. (E/T) A. A. Pistol'kors. 12, 79 (1967) [172, 334 (1967)]
- On the Relative Role of Direct and Indirect Transitions in Optical Absorption. (T) V. B. Tulvinskii and Yu. A. Shuba. 12, 141 (1967) [172, 1057 (1967)]
- The Nonexponential Decay Law and Interference Experiments. (T) L. A. Khalifa. 12, 143 (1967) [172, 1059 (1967)]
- EPR Investigation of Gallium Glass. (T/E) D. M. Yudin, A. I. Sherstyuk, and T. S. Tschomskaya. 12, 146 (1967) [172, 1063 (1967)]

- Interparticle Interference in Light Scattering by Glasses Containing Submicroscopic Inhomogeneities. (E/T) N. S. Andreev and T. L. Ershova. 12, 149 (1967) [172, 1299 (1967)]
- Holography Using a Direct Reference Beam. (E/T) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 371 (1967) [173, 1059 (1967)]
- Nature of Optical Inhomogeneities in Quartz Crystals. (E) G. V. Kleshech, I. V. Kabanovich, and L. N. Chernyi. 12, 413 (1967) [174, 585 (1967)]
- Integrated Intensities in the Infrared Absorption Spectra of Methylethoxysilanes $(CH_3)_nSi(OC_2H_5)_{4-n}$ ($n = 0, 1, 2, 3$). (E) V. A. Arbuzova, I. F. Kovalev, E. N. Tikhomirova, M. G. Voronkov, and L. A. Zagat. 12, 481 (1967) [174, 320 (1967)]
- Anomalous Photovoltaic Effect in Monochromatic Light. (E) É. I. Adirovich, V. M. Rubinov, and Yu. M. Yubov. 12, 477 (1967) [174, 545 (1967)]
- Electron Paramagnetic Resonance of Rare-Earth Elements in Glasses. (E) T. S. Al'tshuler. 12, 481 (1967) [174, 549 (1967)]
- Phase Holograms of Tracks in Bubble and Emulsion Chambers and the Feasibility of Interpreting Them. (E) A. P. Komar, M. V. Stabnikov, and B. G. Turukhano. 12, 590 (1967) [174, 1052 (1967)]
- The Relation between the "Spoke" Extra Reflections in Laue Patterns of Natural Diamonds and Their Optical Properties. (E) E. V. Sobolev, L. V. Lisoivan, and S. V. Lenskaya. 12, 665 (1967) [175, 582 (1967)]
- Experimental Study of the Limits of Applicability of Buzer's Law for the Description of the Attenuation of Narrow Collimated Light Beams in Dispersive Media. (E) V. E. Zuev, M. V. Kabanov, V. A. Savel'ev. 12, 704 (1968) [175, 327 (1967)]
- Study of Defects in Mutually Oriented Polycrystalline Bi-Sb Thin Films by the Moiré Method. (E) L. S. Palatnik, V. M. Kosevich, and A. I. Fedorenko. 12, 717 (1968) [175, 69 (1967)]
- Anisotropy of Optical Transitions in Metallochlorides and Chlorophyll. (E) A. N. Sevechenko, K. N. Solov'ev, V. A. Mashechenko, S. F. Shkirman, and A. P. Losev. 12, 787 (1968) [175, 797 (1967)]
- Use of an Interferometer with a Diffraction Grating to Investigate Flow around Models in a Shock Tube. (T) L. A. Vasil'ev, I. V. Ershov, É. V. Sokolenko, and V. I. Yanichkin. 12, 802 (1968) [175, 1245 (1967)]
- Faraday Effect and Optical Constants of Iron-Nickel Alloy Films. (E) L. V. Kirenski, N. I. Syrova, and I. S. Edel'man. 12, 819 (1968) [175, 813 (1967)]
- Relations between the Optical Characteristics of a Material and the Einstein Coefficients of Its Molecules in the Case of Condensed Media and Levels of Finite Width. (T) N. G. Bakshalev, O. P. Girin, and V. S. Libov. 12, 935 (1968) [176, 805 (1967)]
- Possibility of Obtaining Holograms Using a Reference Beam Whose Wavelength Differs from the Wavelength of the Light Scattered by an Object. (T) Yu. N. Denisuyuk and D. I. Stasel'ko. 12, 954 (1968) [176, 1274 (1967)]
- Theory of the Holographic Microscope. (T) A. A. Pistol'kors. 12, 966 (1968) [176, 816 (1967)]
- Holography without a Reference Beam. (T/E) V. V. Aristov, V. L. Broude, L. V. Koval'ski, V. K. Polyanaki, V. B. Timofeev, and V. Sh. Shekhtman. 12, 1035 (1968) [177, 65 (1967)]
- The Uniqueness of Solutions of Integral Equations of the Second Kind for Diffraction on Nonclosed Screens. (T) Ya. N. Fel'd. 12, 1122 (1968) [177, 820 (1967)]
- PHOTOELECTRIC PHENOMENA**
- Spectral Dependence of the Photoionization of Sensitivity Centers in Cadmium Sulfide. (T/E) V. E. Laabkarev and A. A. Pashchenko. 12, 42 (1967) [172, 77 (1967)]
- Interaction between Triplet Excitons and the Excited Molecules of an Impurity. (E) A. S. Gaeviski and A. N. Paldysh. 12, 130 (1967) [172, 809 (1967)]
- On the Relative Role of Direct and Indirect Transitions in Optical Absorption. (T) V. B. Tulvinski and Yu. A. Shuba. 12, 141 (1967) [172, 1057 (1967)]
- Relaxation of Anomously Large Photo-voltages in Cadmium Telluride Films. (E) É. I. Adirovich and N. Shakirov. 12, 226 (1967) [173, 298 (1967)]
- Calculation of the Energy of Molecular Excitons. (T) A. S. Davydov and É. N. Myasnikov. 12, 346 (1967) [173, 1040 (1967)]
- Electron Paramagnetic Resonance of Vanadium and Chromium in CaF_2 . (E) M. M. Zaripov, V. S. Kropotov, L. D. Livanova, and V. G. Stepanov. 12, 348 (1967) [173, 1045 (1967)]
- Two-Photon Absorption Spectrum in CoS near the Fundamental Absorption Edge. (E/T) V. K. Konyukhov, L. A. Kulevskii, and A. M. Prokhorov. 12, 354 (1967) [173, 1048 (1967)]
- Anomalous Photovoltaic Effect in Monochromatic Light. (E) É. I. Adirovich, V. M. Rubinov, and Yu. M. Yubov. 12, 477 (1967) [174, 545 (1967)]
- Cooperative Luminescence Sensitization of Silver-Halide Salts and Spectral Sensitization of Photographic Emulsions. (E) V. V. Ovsyankin and P. P. Feofilov. 12, 573 (1967) [174, 787 (1967)]
- Anisotropy of Optical Transitions in Metallochlorides and Chlorophyll. (E) A. N. Sevechenko, K. N. Solov'ev, V. A. Mashechenko, S. F. Shkirman, and A. P. Losev. 12, 787 (1968) [175, 797 (1967)]
- Negative Photomechanical Effect in Cadmium Sulfide. (E/T) V. A. Drozdov, L. A. Mozgovaya, and A. L. Ryachev. 12, 1038 (1968) [177, 68 (1967)]
- PLASMAS**
- Spectroscopic Investigation of Gas Discharge for Argon Ion-Optical Lasers. (E) V. F. Kitaeva, Yu. I. Osipov, and N. N. Sobolev. 12, 55 (1967) [172, 317 (1967)]
- Waves and Noises in the Positive-Colum Plasma at Low Pressures. (E/T) A. A. Zaitsev and B. N. Shvilkina. 12, 68 (1967) [172, 565 (1967)]
- Automodel Solutions of the Problem Relating to the Recombination Decay of Plasma. (T) T. L. Perel'man and S. I. Anisimov. 12, 136 (1967) [172, 817 (1967)]
- Magnetic Field Distribution in a Coaxial Plasma Injector. (E) P. E. Kovrov, A. I. Morozov, L. G. Tokarev, and G. Ya. Shchepkin. 12, 155 (1967) [172, 1305 (1967)]
- Raman Scattering of Ultrahigh-Frequency Radiation by Ion-Acoustic Vibrations of a Confined Plasma. (T) D. D. Ryutov. 12, 223 (1967) [173, 73 (1967)]
- Nonlinear Effect of the Formation of a Self-Sustaining High-Temperature Conducting Gas Layer in Nonstationary Magnetohydrodynamic Processes. (E) A. N. Tikhonov, A. A. Samarski, L. A. Zaklyaz'minski, P. P. Volosovich, L. M. Degtyarev, S. P. Kuryumov, Yu. P. Popov, V. S. Sokolov, and A. P. Favorski. 12, 331 (1967) [173, 808 (1967)]
- Nonlinear Drift Waves in a Plasma. (T) V. I. Petviashvili. 12, 456 (1967) [174, 66 (1967)]
- Plasma Resistance as a Function of Electric Field Strength. (E) B. A. Demidov, N. I. Elagin, and S. D. Panchenko. 12, 467 (1967) [174, 327 (1967)]
- Relation of the Bohm Criterion to Ambipolar Sound Generation in Positive-Colum Gas Discharge Plasmas. (T/E) V. V. Vladimirov. 12, 490 (1967) [174, 560 (1967)]
- Radiation Instability of a Bounded Plasma. (T) S. G. Alkhanov. 12, 601 (1967) [174, 1300 (1967)]
- Stochastic Breakdown of Magnetic Surfaces in a Stellarator. (T) B. V. Chirikov. 12, 612 (1967) [174, 1313 (1967)]
- Some Particular Solutions of the Equations Describing Axially Symmetric Motion of a Gravitating Rarefied Plasma. (T) E. V. Ryzanov. 12, 684 (1968) [175, 309 (1967)]
- Pulsation of a Rotating Cylinder of Plasma at Zero Temperature Gradient. (T) E. V. Ryzanov. 12, 686 (1968) [175, 542 (1967)]
- Plasma Ionization Instability in Crossed Fields. (E) I. Ya. Shipuk and S. V. Pashkin. 12, 959 (1968) [176, 1278 (1967)]

POLYMERS

- Frictional Properties of Rubber-like Polymers at High Temperatures under Vacuum. (E) A. I. El'kin and V. N. Nikolaev. 12, 384 (1967) [173, 1302 (1967)]
- On the Disintegration of the Structure and Strength of Polymer Materials. (E) A. A. Vakulenko, Yu. N. Litov, and V. M. Chebanov. 12, 691 (1968) [175, 539 (1967)]
- Electron Emission during Vibro-Mechanical Treatment of Polymers. (E) A. M. Polyakov, Yu. F. Kurdubov, N. K. Baramboin, and N. A. Krotova. 12, 720 (1968) [175, 72 (1967)]

QUANTUM MECHANICS

- New Formulation of Quantum Theory. (T) A. S. Shvarts. 12, 309 (1967) [173, 793 (1967)]
- Thirring Four-Fermion Model and Perturbation Theory. (T) A. V. Astakhov. 12, 552 (1967) [174, 771 (1967)]
- Problem of a Hydrodynamical Approximation for the Green's Functions of a Superfluid Bose System. (T) V. A. Krasnikov. 12, 558 (1967) [174, 1037 (1967)]
- Temperature Green's Functions for Weakly Nonideal Bose-Einstein Systems. (T) V. V. Tolmachev. 12, 790 (1968) [175, 800 (1967)]
- ΔF , Δn , and Δp Corrections in the Asymptotic Expansion Method in the Modified Formulation of the Problem of a Nonideal Bose-Einstein System. (T) V. V. Tolmachev. 12, 799 (1968) [175, 1036 (1967)]
- Complex Splitting of the Nuclear Magnetic Resonance Spectrum of a Two-Spin System. (T/E) B. M. Moiseev and L. I. Fedorov. 12, 806 (1968) [175, 1249 (1967)]
- A Realization of Infinite-Dimensional Representations of the Rotation Group with Complex Spin by Entire Functions. (T) S. S. Sannikov. 12, 932 (1968) [176, 801 (1967)]
- Relations between the Optical Characteristics of a Material and the Einstein Coefficients of its Molecules in the Case of Compressed Media and Levels of Finite Width. (T) N. G. Bakshiev, O. P. Girin, and V. S. Litov. 12, 935 (1968) [176, 805 (1967)]
- Vacuum Quantum Fluctuations in Curved Space and the Theory of Gravitation. (T) A. D. Sakharov. 12, 1040 (1968) [177, 70 (1967)]
- Perturbation Theory for the Expansion Coefficients of a Two-Electron Wave Function. (T) A. M. Ermolaev. 12, 1144 (1968) [177, 1302 (1967)]

RADIATION

- Possible Polarization of Bremsstrahlung from Solar Flares. (T) A. A. Korchak. 12, 192 (1967) [173, 291 (1967)]
- The Effect of Generation Self-cut-off in a Ruby Laser. (E) V. L. Broude, V. I. Kravchenko, P. P. Pogorelski, E. N. Sal'kova, and M. S. Soskin. 12, 214 (1967) [173, 64 (1967)]
- Raman Scattering of Ultrahigh-Frequency Radiation by Ion-Acoustic Vibrations of a Confined Plasma. (T) D. D. Ryutov. 12, 223 (1967) [173, 73 (1967)]
- Possibility of Modulating the Radiation of a Semiconductor Laser by Heating the Current Carriers. (T) N. G. Basov, Yu. M. Popov, and A. V. Usenaki. 12, 343 (1967) [173, 1036 (1967)]
- Effect of Deformation on the Angular Distribution of Annihilation Quanta in Nickel and Copper Alloys. (E) A. A. Adamenko, I. Ya. Dekhtyar, and V. S. Mikhailenkov. 12, 374 (1967) [173, 1291 (1967)]
- Relationship between the Radio Emission of Local Sources on the Sun and the Structure of Optically Observed Active Regions. (E) A. R. Abbasov. 12, 403 (1967) [174, 538 (1967)]
- Radiation Effects in Experiments with Colliding Electron Beams. (T) V. N. Baier, V. S. Padin, and V. A. Khoze. 12, 464 (1967) [174, 323 (1967)]
- Radiation Dynamics Equations for Lasers. (T) Yu. A. Tarasov and T. N. Zubarev. 12, 598 (1967) [174, 1060 (1967)]
- Radiation Instability of a Bounded Plasma. (T) S. G. Altkhanov. 12, 601 (1967) [174, 1300 (1967)]

Effect of Magnetic Transformations on the Shape of the Angular Distribution of γ Quanta from Positron-Electron Annihilation in Ferromagnetic Materials. (E) I. Ya. Dekhtyar, V. S. Mikhailenkov, and S. G. Sakharova. 12, 618 (1967) [174, 803 (1967)]

Radiation of Elementary Particles. (T) K. P. Stanyukovich. 12, 808 (1968) [175, 1252 (1967)]

The Anomalous Energy Dependence of the Polarization of the Radiation from Atoms Excited by a Beam of Electrons. (T) G. V. Sholin. 12, 811 (1968) [175, 1256 (1967)]

Radiation Diffusion in the Presence of a Strongly Elongated Dispersion Indicatrix. (T) V. V. Sobolev. 12, 1083 (1968) [177, 812 (1967)]

An Algorithm for the Determination of Parameters of a Particle Moving in a Hydrogen Chamber under Conditions of an Inhomogeneous Magnetic Field and Damping. (T) F. M. Filler. 12, 1138 (1968) [177, 1058 (1967)]

RELATIVITY AND GRAVITATION

- Electromagnetic Waves in the General Theory of Relativity. (T) É. Ya. Malybavna. 12, 67 (1967) [172, 320 (1967)]
- Momentum and Energy of Gravitational Waves. (T) M. F. Shirokov and L. I. Bud'ko. 12, 62 (1967) [172, 326 (1967)]
- Matrix Elements of Lorentz Transformations for a Unitary Representation. (T) Tao Wang-tyk and Nguen Van Heu. 12, 312 (1967) [173, 1281 (1967)]
- Exact Solutions of Equations Describing the Motion of a Gravitating Gas with Homogeneous Deformations and Transverse Velocity Components. (T) E. V. Ryzanov. 12, 743 (1968) [175, 774 (1967)]
- Chronometric Invariance and the Problem of Gravitational Energy. (T) N. V. Milskevich and José D. Mujica. 12, 939 (1968) [176, 809 (1967)]
- A Uniform Axisymmetric Cosmological Model in the Ultrarelativistic Case. (T) I. S. Shikin. 12, 950 (1968) [176, 1048 (1967)]
- Vacuum Quantum Fluctuations in Curved Space and the Theory of Gravitation. (T) A. D. Sakharov. 12, 1040 (1968) [177, 70 (1967)]
- Unsteady Escape of Gas in a Constant Gravity Field. (T) K. P. Stanyukovich and K. Dzhusupov. 12, 1110 (1968) [177, 804 (1967)]
- Study of the Critical State of a Liquid Using Gravitational Waves. (E/T) M. Sh. Gitterman. 12, 1141 (1968) [177, 1298 (1967)]

RESONANCE

- Proton Magnetic Resonance and Position of Hydrogen Atoms in Natural Edingtonite. (E/T) I. A. Belitski, S. P. Gabuda, and A. G. Lundin. 12, 119 (1967) [172, 1318 (1967)]
- FPR Investigation of Gallium Glass. (T/E) D. M. Yudin, A. I. Shera-tyuk, and T. S. Teekhonskaya. 12, 146 (1967) [172, 1063 (1967)]
- Isotopic Hyperfine Structure of the EPR Spectrum of Cu^{+} in ZnWO_4 . (E) A. A. Galkin, A. D. Prokhorov, G. A. Talintadze, and V. A. Shapovalov. 12, 236 (1967) [173, 309 (1967)]
- Paramagnetic Resonance of Fluoborate Glasses Containing Cobalt and Nickel. (E) D. M. Yudin, G. A. Tsurikova, and G. T. Petrovskii. 12, 337 (1967) [173, 815 (1967)]
- Electron Paramagnetic Resonance of Vanadium and Chromium in CaF_2 . (E) M. M. Zaripov, V. S. Kropotov, L. D. Livanova, and V. G. Stepanov. 12, 348 (1967) [173, 1043 (1967)]
- Nuclear Resonance Fluorescence of Highly Excited States of Ni^{42} , Cd^{114} , and Pb^{208} . (E) S. V. Starodubtsev, R. B. Begzhanov, and A. A. Islamov. 12, 472 (1967) [174, 332 (1967)]
- Electron Paramagnetic Resonance of Rare-Earth Elements in Glasses. (E) T. S. Al'tshuler. 12, 481 (1967) [174, 549 (1967)]
- Investigation of Transition from Linear to Nonlinear Conditions in Parametric Resonance. (T) Yu. N. Smirnov. 12, 596 (1967) [174, 1057 (1967)]
- Hyperfine Structure of the Electron Paramagnetic Resonance Spectra of the Vanadyl Ion in Vanadium-Containing Glasses. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovskii. 12, 780 (1968) [175, 789 (1967)]

Complex Splitting of the Nuclear Magnetic Resonance Spectrum of a Two-Spin System. (T/E) B. M. Molisev and L. I. Fedorov. 12, 806 (1968) [175, 1249 (1967)]

SCATTERING

Anisotropy of the Angular Distribution and Structure of the Energy Distribution of Ions Scattered from the Surface of a Single Crystal. (E/T) A. A. Aliev and U. A. Arifov. 12, 30 (1967) [172, 65 (1967)]

Energy Structure of Collision Cascade of Identical Particles in a Stopping Medium. (T) V. M. Lenchenko and S. V. Starodubtsev. 12, 45 (1967) [172, 80 (1967)]

Two-Photon Absorption in $\text{CaF}_2:\text{H}_2\text{O}$ Crystals. (E/T) B. V. Ershov, Yu. P. Pimenov, A. M. Prokhorov, and V. B. Fedorov. 12, 47 (1967) [172, 309 (1967)]

Multiple Collisions in the Scattering of Ions by Crystals. (E) E. S. Mashkova and V. A. Molchanov. 12, 153 (1967) [172, 813 (1967)]

Interparticle Interference in Light Scattering by Glasses Containing Submicroscopic Inhomogeneities. (E/T) N. S. Andreev and T. I. Ershova. 12, 149 (1967) [172, 1399 (1967)]

Effect of the Incoherent Component of Electron Scattering on the Quality of the Interference Pattern. (T/E) I. G. Stoyanova and I. F. Anaskin. 12, 357 (1967) [173, 1052 (1967)]

Equation of Radiative Transfer in a Model of Isotropic Point Scatterers. (T) Yu. N. Barabanenkov. 12, 431 (1967) [174, 53 (1967)]

Polarization Effects in Coulomb Scattering of 4-MeV Neutrons by Copper, Lead, and Uranium. (E/T) G. V. Gorlov, N. S. Lebedeva, and V. M. Morozov. 12, 451 (1967) [174, 60 (1967)]

Feasibility of Investigating the Acoustical Properties of Liquids in the Frequency Range 10^5 to 10^{10} cps from Data on the Scattered-Light Diagram. (T/E) M. I. Shakhparonov. 12, 459 (1967) [174, 69 (1967)]

The Relation between the "Spikes" Extra Reflections in Laue Patterns of Natural Diamonds and Their Optical Properties. (E) E. V. Sobolev, V. I. Liovinov, and S. V. Lenskaya. 12, 665 (1968) [175, 582 (1967)]

The Kinetics of Healing of Fission-Fragment Tracks in Thin Mica Sheets. (E/T) Ya. E. Gugin, I. G. Berzina, and I. V. Vorob'eva. 12, 814 (1968) [175, 807 (1967)]

Radiation Diffusion in the Presence of a Strongly Elongated Dispersion Indicatrix. (T) V. V. Sobolev. 12, 1083 (1968) [177, 812 (1967)]

SEMICONDUCTORS

Relaxation of Anomalous Large Photo-voltages in Cadmium Telluride Films. (E) É. I. Adirovich and N. Shakirov. 12, 226 (1967) [173, 298 (1967)]

Possibility of Modulating the Radiation of a Semiconductor Laser by Heating the Current Carriers. (T) N. G. Baov, Yu. M. Popov, and A. V. Uspenski. 12, 343 (1967) [173, 1036 (1967)]

Anomalous Photovoltaic Effect in Monochromatic Light. (E) É. I. Adirovich, V. M. Rubinov, and Yu. M. Yashov. 12, 477 (1967) [174, 545 (1967)]

Interaction of Ultrasonic Surface and Volume Waves with Conduction Electrons in a CdS Crystal. (E) I. A. Viktorov. 12, 487 (1967) [174, 556 (1967)]

Acoustoelectric Effect in CdSe under Constant Amplification of Ultrasound by Electron Flow. (T/E) V. I. Pustovoi, V. I. Baibakov, and G. S. Pado. 12, 576 (1967) [174, 791 (1967)]

Hypertine Structure of the EPR Line with a g Factor ~ 4.3 Due to Mn^{2+} in the Chalcogenide Glasses $\text{TiSeAs}_2\text{Se}_3$, $\text{Ti}_2\text{SAs}_2\text{Se}_3$, and $\text{Ti}_2\text{TeAs}_2\text{Se}_3$. (E) V. N. Lazukin and I. V. Chepeleva. 12, 606 (1967) [174, 1306 (1967)]

Study of Solid Solutions in the $\text{HgTe}-\text{HgS}$ and $\text{HgSe}-\text{HgS}$ Systems. (E) F. F. Kharakhoria, V. M. Petrov, M. V. Pashkovskii, and R. V. Lutsiv. 12, 869 (1968) [176, 62 (1967)]

Spectral Evidence of Interaction between Organic Molecules and the Surface of a TlI Hole Semiconductor. (E) Yu. D. Pimenov. 12, 883 (1968) [176, 556 (1967)]

Negative Photomechanical Effect in Cadmium Sulfide. (E/T) V. A. Drozdov, L. A. Mozgovaya, and A. L. Rvachev. 12, 1038 (1968) [177, 68 (1967)]

Emission Currents in Diodes Having a GaAs-Layer Structure. (E/T) É. I. Adirovich, L. A. Dubrovskii, and L. B. Suzdalkina. 12, 1129 (1968) [177, 1047 (1967)]

Phase Diagrams and Structure of Some Semiconductor $\text{Al}_x\text{C}_{1-x}\text{V}_2$ - $\text{Bi}_{1-x}\text{C}_{1-x}\text{V}_2$ Alloys. (E) L. S. Palatnik and E. I. Rogacheva. 12, 503 (1967) [174, 80 (1967)]

STATISTICAL MECHANICS AND THERMODYNAMICS

Operational Method of Determining Certain Integral Characteristics of Nonstationary Transport Processes in Active Media. (T) V. K. Egerev. 12, 493 (1967) [174, 564 (1967)]

Velocity Distribution Function of the Gas Molecules near a Solid Wall in a Nonuniformly Heated Gas. (T) Yu. I. Yalanov, I. N. Ischenko, and B. V. Deryagin. 12, 714 (1968) [175, 549 (1967)]

Variational Principles for the Equations of the Kinetic Theory of Gases. (T) A. M. Kogan. 12, 777 (1968) [175, 785 (1967)]

Thermodynamic Properties of Superconductors with Nonmagnetic Impurities. Overlap of Energy Bands. (T) V. A. Moskalenko. 12, 877 (1968) [175, 301 (1967)]

Thermodynamic Relations on the Surface of a Strong Discontinuity in a Flatly Deformed Elastic Medium. (T) E. M. Chernykh. 12, 1079 (1968) [177, 546 (1967)]

Equation of State of Trinitrotoluene. (T) G. V. Belyakov and G. G. Vilenskaya. 12, 1132 (1968) [177, 1050 (1967)]

STRENGTH OF MATERIALS

Topography of the Distribution of the Nonequilibrium Concentration of Vacancies Associated with the Mutual Diffusion of Two Components in the Creep Process. (T) M. A. Kriashal and V. I. Strelkov. 12, 86 (1967) [172, 576 (1967)]

Physical Nature of the Hardening of Steels under the Influence of Light Pulses. (E) L. I. Mirkin and N. F. Piliptskii. 12, 89 (1967) [172, 580 (1967)]

Strengthening of Metals by Decorating Dislocations with Surface-Active Impurities. (E) V. I. Likhtman, M. A. Kriashal, S. A. Golovin, and I. A. Goncharenko. 12, 167 (1967) [172, 826 (1967)]

Some Peculiarities in the Kinetics of High-Temperature Creep and Fracture in Thin Electrolytic Metal Films. (E/T) B. Ya. Pines and R. I. Kuznetsova. 12, 264 (1967) [173, 79 (1967)]

Load Endurance of Thin Electrolytic Copper Films under Longitudinal and Subsequent Transverse Loading. (E) B. Ya. Pines and R. I. Kuznetsova. 12, 272 (1967) [173, 329 (1967)]

Temperature Dependence of the Critical Shear Stress of Copper-Nickel-Cobalt Alloys. (E) G. I. Nosova and N. T. Travina. 12, 281 (1967) [173, 560 (1967)]

Structural Transitions in Iron-Carbon Melts. (E/T) E. S. Filippov, V. K. Grigorovich, and A. M. Samarin. 12, 284 (1967) [173, 564 (1967)]

Controlled Hardening of Glass by Quenching in Liquids. (E) I. A. Bogutlavskii. 12, 388 (1967) [173, 1298 (1967)]

Deformation and Fracture of Cementite. (E) A. A. Baranov and O. I. Fomichev. 12, 495 (1967) [174, 71 (1967)]

Strengthening of Crystalline Substances by the Stepped Low-Temperature Creep Method. (E) I. A. Gindin, V. M. Godzhaev, N. K. Nechvolod, and Ya. D. Starodubov. 12, 498 (1967) [174, 73 (1967)]

Kinetics of Fracture under Biaxial Stress. (E) Ya. B. Fridman, T. K. Zilova, and N. I. Novosiltseva. 12, 518 (1967) [174, 572 (1967)]

Mechanical Strength of Tungsten Microcrystals. (E) R. I. Garber, Zh. I. Dranava, and I. M. Mikhailovskii. 12, 584 (1967) [174, 1044 (1967)]

Structure of Glass Fibers. (E) G. M. Bartenev and R. G. Chernyakov. 12, 615 (1967) [174, 800 (1967)]

Fracture Diagrams of Solids. (E) B. A. Drozdovskii, V. M. Markochev, and Ya. B. Fridman. 12, 622 (1967) [174, 807 (1967)]

- Determination of Stresses in Solids by the Polarized-Ultrasonic Frequency Method. (E) Yu. A. Niliander, G. A. Budenkov, and G. Ya. Pochtovik. 12, 641 (1967) [174, 1065 (1967)]
- On the Disintegration of the Structure and Strength of Polymer Materials. (E) A. A. Vakulenko, Yu. N. Litov, and V. M. Chebanov. 12, 691 (1968) [175, 539 (1967)]
- Creep of Metals. (T) T. B. Larina. 12, 842 (1968) [175, 1030 (1967)]
- Development of Dislocation Arrays in Surface Layers of Metals under Certain Types of Loading. (E) B. I. Kostetskii and V. V. Shevelva. 12, 892 (1968) [176, 70 (1967)]
- Mechanism of High-Temperature Creep of Metals with High Stacking-Fault Energy. (T) V. A. Yanushevich and L. I. Ivanov. 12, 905 (1968) [176, 312 (1967)]
- Effect of Electron Bombardment on the Mechanical Properties of High-Strength Steel. (E) B. A. Prusakov, D. A. Prokoshkin, L. N. Byastrov, and L. I. Ivanov. 12, 912 (1968) [176, 568 (1967)]
- Fundamental Boundary Value Problems in Potential Theory for a Space with an Elliptic Slot. The Pressure Due to an Elliptic Die on an Elastic Half-Space. (T) M. D. Martynenko. 12, 914 (1968) [176, 53 (1967)]
- Distribution of Microcracks in Concrete. (T/E) V. G. Pashkovskii, N. V. Mikhailov, and P. A. Rebinder. 12, 1065 (1968) [177, 314 (1967)]
- Metal Fatigue. (T) T. B. Larina. 12, 1077 (1968) [177, 59 (1967)]
- Development of Collective Recrystallization and Polygonization of Silicon Iron in High-Temperature Fatigue Testing. (T/E) M. G. Lozinaki and A. N. Romanov. 12, 1158 (1968) [177, 1065 (1967)]
- Temperature Dependence of the Diffusion Mobility of Metals. (E/T) D. A. Prokoshkin and E. V. Vasil'eva. 12, 1162 (1968) [177, 1069 (1967)]

SUPERCONDUCTIVITY

- The Hydrodynamic Equations in the Theory of Superconductivity. (T) A. V. Sviditskii and V. A. Slyusarev. 12, 59 (1967) [172, 322 (1967)]
- Local Approximation in the Electrodynamics of London Superconductors. (T) A. V. Sviditskii and V. A. Slyusarev. 12, 71 (1967) [172, 569 (1967)]
- Electrodynamics of Two-Band Superconductors in the Neighborhood of the Upper Critical Field. (T) V. A. Moskalenko. 12, 256 (1967) [173, 546 (1967)]
- Superconductivity in the System Nb_3Al-Mo_3Al . (E) N. E. Alekseevskii, I. I. Kornilov, N. M. Matveeva, and Yu. A. Maksimov. 12, 275 (1967) [173, 553 (1967)]
- Superconducting Properties of Vanadium-Niobium Alloys. (E) N. N. Sirota and É. A. Ovsichuk. 12, 516 (1967) [174, 570 (1967)]
- Thermodynamic Properties of Superconductors with Nonmagnetic Impurities. Overlap of Energy Bands. (T) V. A. Moskalenko. 12, 877 (1968) [176, 301 (1967)]
- The Question of High-Temperature and Surface Superconductivity. (T) V. L. Ginzburg and D. A. Kirzhnits. 12, 880 (1968) [176, 553 (1967)]
- Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. (E) N. E. Alekseevskii, O. S. Ivanov, I. I. Raevskii, and N. V. Stepanov. 12, 896 (1968) [176, 305 (1967)]
- A Pulsed Magnetohydrodynamic Generator with a Superconducting Magnetic System. (E) V. A. Kirillin, A. E. Sheindin, É. I. Asinovskii, V. V. Sychev, V. B. Zenkevich, A. M. Maksimov, and V. A. Al'tov. 12, 1059 (1968) [177, 77 (1967)]
- Behavior of the Critical Current in Wires of Superconducting Niobium Alloys as a Function of Magnetic Field and Temperature. (E) B. G. Lazarev, L. S. Lazareva, and S. I. Goridov. 12, 1150 (1968) [177, 1310 (1967)]

SURFACE PROPERTIES

- Long-Range Action of Active Centers on Crystal Surfaces. (E) G. I. Dietler and S. A. Kobzareva. 12, 112 (1967) [172, 1069 (1967)]

- Energy Exchange in the Interaction of Atoms with the Surface of an Ideal Crystal. (T) Yu. A. Ryzhov and D. S. Strizhenov. 12, 158 (1967) [172, 1309 (1967)]
- Surface Tension of Melts Belonging to the Tin-Gold System. (E) N. L. Pokrovskii, P. P. Pugachevich, and Kh. I. Ibragimov. 12, 170 (1967) [172, 829 (1967)]
- The Experimental Separation of the Frenkel and Kirkendall Effects. (E) Ya. E. Goguzin, Yu. I. Boiko, and L. N. Paritskaya. 12, 267 (1967) [173, 323 (1967)]
- Interaction of Ultrasonic Surface and Volume Waves with Conduction Electrons in a CdS Crystal. (E) I. A. Viktorov. 12, 487 (1967) [174, 556 (1967)]
- The Question of High-Temperature and Surface Superconductivity. (T) V. L. Ginzburg and D. A. Kirzhnits. 12, 880 (1968) [176, 553 (1967)]
- Development of Dislocation Arrays in Surface Layers of Metals under Certain Types of Loading. (E) B. I. Kostetskii and V. V. Shevelva. 12, 892 (1968) [176, 70 (1967)]
- Mechanism of Formation of Hydrocarbon Impurities on Surfaces Irradiated by a Narrow Electron Beam. (E/T) O. I. Zhdanov and V. N. Vertner. 12, 942 (1968) [176, 1040 (1967)]

THERMAL PROPERTIES AND HEAT TRANSFER

- Probability Distribution of the Square of the Temperature Difference between Two Points of a Turbulent Flow. (E/T) A. S. Gurvich. 12, 17 (1967) [172, 554 (1967)]
- Thermal Processes in Thin Films. (T) Yu. M. Volokobinskii, B. Yu. Lotozki, V. V. Pasynkov, and L. K. Chirkin. 12, 73 (1967) [172, 83 (1967)]
- Characteristics of the Heat Transfer to a Turbulent Fluid Flow at Supercritical Pressure. (E/T) N. L. Kafengauz. 12, 278 (1967) [173, 557 (1967)]
- Equations for Short Waves in a Viscous Heat-Conducting Gas. (T) G. M. Shefter. 12, 297 (1967) [173, 785 (1967)]
- Thermal Conductivity of Sodium Chloride at Helium Temperatures. (E/T) E. G. Shvidkovskii and V. M. Zakharov. 12, 335 (1967) [173, 812 (1967)]
- Equation of Radiative Transfer in a Model of Isotropic Point Scatterers. (T) Yu. N. Barabanenkov. 12, 431 (1967) [174, 53 (1967)]
- A Steady-State Heat Conduction Problem. (T) V. S. Rabin. 12, 561 (1967) [174, 1041 (1967)]
- Effects of Peak Frequency in a Laser Pulse on the Heating of Metal Sheets. (T) N. N. Rykalin, A. A. Uglov, and N. I. Markarov. 12, 644 (1967) [174, 1068 (1967)]
- Velocity Distribution Function of the Gas Molecules near a Solid Wall in a Nonuniformly Heated Gas. (T) Yu. I. Yalanov, I. N. Ivchenko, and B. V. Deryagin. 12, 714 (1968) [175, 549 (1967)]
- Determination of the Maximum Work in an Isolated System with Limited Energy Capacities of the Heat Source and Sink. (T) G. A. Varshavskii. 12, 1115 (1968) [177, 828 (1967)]

WAVE PROPAGATION

- The Direct Problem of Plane Symmetrical Flow with Detached Shock Wave about a Smooth Convex Profile. (T) É. G. Shifrin. 12, 4 (1967) [172, 550 (1967)]
- Asymptotic Law of Propagation of a Plane Detonation Wave. (T) G. G. Chernyi. 12, 21 (1967) [172, 558 (1967)]
- Electromagnetic Waves in the General Theory of Relativity. (T) É. Ya. Malydvaeva. 12, 87 (1967) [172, 320 (1967)]
- Momentum and Energy of Gravitational Waves. (T) M. F. Shirokov and L. I. Bud'ko. 12, 62 (1967) [172, 326 (1967)]
- Waves and Noises in the Positive-Column Plasma at Low Pressures. (E/T) A. A. Zaitsev and B. N. Shvilkin. 12, 68 (1967) [172, 565 (1967)]
- Determination of the Dispersion of Elastic Vibrations in the Potassium Chloride Crystal Lattice Using X-Ray Diffuse Scattering. (E) V. I. Startsev and I. S. Braude. 12, 138 (1967) [172, 1053 (1967)]

- Formation of a Wurtzite-like Modification of Boron Nitride in Shock Compression. (E) G. A. Adashurov, Z. G. Aliev, L. O. Atomyan, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Drem'in, A. Kh. Muranevich, and S. V. Pershin. 12, 173 (1967) [172, 1066 (1967)]
- Vibrations of an Unbounded Laminated Plate in a Gas Flow. (T) A. I. Smirnov. 12, 179 (1967) [172, 801 (1967)]
- Unsteady Vibrations of a Free Sandwich Strip. (T) A. I. Smirnov. 12, 182 (1967) [172, 1043 (1967)]
- Equations for Short Waves in a Viscous Heat-Conducting Gas. (T) G. M. Sheffer. 12, 297 (1967) [173, 785 (1967)]
- Electromagnetic Oscillations in a Dielectric Cylinder Located between Reflecting Planes. (T) N. G. Vakhitov. 12, 365 (1967) [173, 818 (1967)]
- The Three-Dimensional Cauchy-Poisson Problem for Waves on the Surface of a Viscous Liquid of Finite Depth. (T) A. K. Nikitin and É. N. Potetyunko. 12, 422 (1967) [174, 50 (1967)]
- Propagation of Unsteady Waves in a Rotating Channel of Constant Depth. (T) V. V. Musatov. 12, 428 (1967) [174, 309 (1967)]
- Nonlinear Drift Waves in a Plasma. (T) V. I. Petviashvili. 12, 456 (1967) [174, 66 (1967)]
- Elementary Particles in the Field of a Plane Electromagnetic Wave. (T) F. I. Fedorov. 12, 474 (1967) [174, 334 (1967)]
- Interaction of Ultrasonic Surface and Volume Waves with Conduction Electrons in a CdS Crystal. (E) I. A. Viktorov. 12, 487 (1967) [174, 556 (1967)]
- Emission and Reflectivity of Venus in the Decimeter Wavelength Range. (T) G. M. Strelkov. 12, 532 (1967) [174, 1292 (1967)]
- Propagation of Wave Beams in Nonlinear Media. (T) V. N. Lugovoi. 12, 866 (1968) [175, 58 (1967)]
- One Condition for the Breakdown of the Region of Continuous Supersonic Flow in the Flow Around a Convex Profile with a Detached Shock Wave. (T) E. G. Shifrin. 12, 924 (1968) [175, 797 (1967)]
- Motion of a Rigid Sphere under the Influence of an Acoustic Pressure Wave. (T) É. I. Grigolyuk and A. G. Gorshkov. 12, 1009 (1968) [177, 539 (1967)]
- Relation between Plastic Volume and Shear Deformations and Shock Waves in Soft Soils. (T/E) V. N. Nikolavskii. 12, 1031 (1968) [177, 542 (1967)]
- Possibility of Unidirectional Oscillation in a Gaseous Traveling Wave Laser. (T) S. G. Zeiger. 12, 1054 (1968) [177, 554 (1967)]
- Study of the Critical State of a Liquid Using Gravitational Waves. (E/T) M. Sh. Gitterman. 12, 1141 (1968) [177, 1298 (1967)]
- ### X RAYS
- X-Ray Structural Analysis of the Crystal Structure of Iodine under High Pressure. (E) S. S. Kabalkina, T. N. Kolobyanina, and L. F. Vereshchagin. 12, 50 (1967) [172, 313 (1967)]
- Determination of the Dispersion of Elastic Vibrations in the Potassium Chloride Crystal Lattice Using X-Ray Diffuse Scattering. (E) V. I. Startsev and I. S. Braude. 12, 138 (1967) [172, 1053 (1967)]
- Effect of X Radiation on Mutual Diffusion in Single Crystals of Alkali Halides. (E) Ya. E. Geguzin and Yu. I. Boiko. 12, 161 (1967) [172, 830 (1967)]
- X-Ray Analysis of the Structure of Nematic Liquid Crystals in Electric and Magnetic Fields by Means of the Distribution Function. (E) B. K. Vainshtein, I. G. Chistyakov, E. A. Kosterin, and V. M. Chaikovskii. 12, 405 (1967) [174, 341 (1967)]
- The Relation between the "Spike" Extra Reflections in Laue Patterns of Natural Diamonds and Their Optical Properties. (E) E. V. Sobolev, V. I. Lisoivan, and S. V. Lenskaya. 12, 665 (1968) [175, 582 (1967)]
- Fine Structure of the X-Ray Emission Bands of Elements of the Iron Transition Group. (E) V. V. Nemoshkalenko and V. Ya. Nagornyi. 12, 735 (1968) [175, 566 (1967)]
- X-Ray Diffraction Study of ZnF_2 at Pressures up to 130 kbar and at Temperatures of 25 and 300°. (E/T) S. S. Kabalkina, L. F. Vereshchagin, and L. M. Litvagina. 12, 946 (1968) [175, 1044 (1967)]
- Fast Electrons and X-Ray Radiation during the Initial Stage of Growth of a Pulsed Spark Discharge in Air. (E) Yu. L. Stankevich and V. G. Kalinin. 12, 1042 (1968) [177, 72 (1967)]
- X-Ray Structural Study of the Double Molybdate $KY(MoO_4)_2$. (E) R. F. Klevtsova and S. V. Borisov. 12, 1095 (1968) [177, 133 (1967)]